

VOLUME 25, 1979

Author Index / Index des auteurs

Under each name are listed, in chronological order of publication, all articles in which an author has participated /
Chaque notice indique, dans l'ordre chronologique de publication, tous les articles auxquels l'auteur a participé

- Ackermann, H.-W.**
Bacteriophage-like particles associated with a spirochete
L. BERTHIAUME, Y. ELAZHARY, R. ALAIN, and
H.-W. ACKERMANN 114
- Ackermann, H.-W.**
DNA base composition, nature of intracellular DNA, morphol-
ogy, and classification of bacteriophages infecting *Micrococcus*
luteus
SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH,
H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and
J.V. SCALETTI 1027
- Ackermann, H.-W.**
Characterization of two *Salmonella newport* bacteriophages
N. MOAZAMIE, H.-W. ACKERMANN, and
M.R.V. MURTHY 1063
- Adams, P.B.**
Mycoparasitism of sclerotia of *Sclerotinia* and *Sclerotium* species
by *Sporidesmium sclerotivorum*
W.A. AYERS and P.B. ADAMS 17
- Adams, P.B.**
Factors affecting germination, mycoparasitism, and survival of
Sporidesmium sclerotivorum
W.A. AYERS and P.B. ADAMS 1021
- Aharonowitz, Y.**
Nitrogen nutrition and regulation of cephalosporin production in
Streptomyces clavuligerus
YAIR AHARONOWITZ and ARNOLD L. DEMAINE 61
- Alain, R.**
Bacteriophage-like particles associated with a spirochete
L. BERTHIAUME, Y. ELAZHARY, R. ALAIN, and
H.-W. ACKERMANN 114
- Allen, D.A.**
Ecology and taxonomy of bacteria attaching to wood surfaces in a
tropical harbor
B. AUSTIN, D.A. ALLEN, A. ZACHARY, M.R. BELAS, and
R.R. COLWELL 447
- Allen, J.M.**
ICMSF methods studies. XIII. An international comparative
study of the MPN procedure and the Anderson-Baird-Parker
direct plating method for the enumeration of *Escherichia coli*
biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG,
J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN,
S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST,
P.M. NOTTINGHAM, and B.J. STEWART 1321
- Allmaras, G.W.**
An agar-gel immunodiffusion test for detection of *Brucella*
antibodies in human serum
K.J. McMAHON, E.D. RENNER, G.W. ALLMARAS, and
D.K. ANDERSON 850
- Anderson, D.K.**
An agar-gel immunodiffusion test for detection of *Brucella*
antibodies in human serum
K.J. McMAHON, E.D. RENNER, G.W. ALLMARAS, and
D.K. ANDERSON 850
- Andrews, J.H.**
The effects of a pesticide program on microbial populations from
apple leaf litter
JOHN H. ANDREWS and CHARLES M. KENERLEY 1331
- Arella, M.**
Production of an extracellular ribonuclease by *Pseudomonas*
Maltophilia
M. ARELLA and M. SYLVESTRE 321
- Arfi, R.**
Etude de l'évolution des populations bactériennes d'origine tellu-
rique, enterique et marine dans des systèmes planctoniques sou-
mis à une pollution urbaine, traitement mathématique des
données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN,
G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC,
A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA,
D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et
D. SAUTRIOT 1073
- Armstrong, G.D.**
Biochemical studies on pili isolated from *Pseudomonas aeruginosa*
strain PAO
W. PARANCHYCH, P.A. SASTRY, L.S. FROST, M. CARPENTER,
G.D. ARMSTRONG, and T.H. WATTS 1175

- Arny, D.C.**
A liquid medium for the production of *Kabatiella zeae* conidia
FRANCISCO J.B. REIFSCHNEIDER and DEANE C. ARNY 1100
- Aron, G.M.**
Temperature-sensitive mutants of bacteriophage SH-133 specific for the hydrogen bacterium *Pseudomonas facilis*: isolation, complementation, and partial characterization
CHRISTINE M. BATTREALL, WILLIAM E. FRIEDRICH, JEFFREY P. REED, and GARY M. ARON 86
- Ashraf, M.**
Erratum: Sporulation in single-spore isolates from amitrole-induced multispored asci of *Saccharomyces cerevisiae*
M. ASHRAF and J.J. MILLER 650
- Ashton, F.E.**
Induction of reaginic (IgE) gonococcal antibodies in the rat by a common antigen of *Neisseria gonorrhoeae*
F.E. ASHTON, H.M. VIJAY, G. LAVERGNE, B. BRODEUR, and B.B. DIENA 138
- Ashton, F.E.**
Evaluation of the antiserum agar method for the serogroup identification of *Neisseria meningitidis*
F.E. ASHTON, A. RYAN, B.B. DIENA, and C.E. FRASCH 784
- Atherly, A.G.**
A new gene involved in expression of fructose-1,6-diphosphate aldolase activity in *Escherichia coli*
ALAN G. ATHERLY and PAUL RUSSELL 937
- Austin, B.**
Ecology and taxonomy of bacteria attaching to wood surfaces in a tropical harbor
B. AUSTIN, D.A. ALLEN, A. ZACHARY, M.R. BELAS, and R.R. COLWELL 447
- Ayers, W.A.**
Mycoparasitism of sclerotia of *Sclerotinia* and *Sclerotium* species by *Sporidesmium sclerotivorum*
W.A. AYERS and P.B. ADAMS 17
- Ayers, W.A.**
Factors affecting germination, mycoparasitism, and survival of *Sporidesmium sclerotivorum*
W.A. AYERS and P.B. ADAMS 1021
- Azoulay, E.**
Hydroxylase regulation in *Candida tropicalis* grown on alkanes
MICHÈLE GILEWICZ, MARCELLE ZACEK, JEAN-CLAUDE BERTRAND, and EDGARD AZOULAY 201
- Babich, H.**
Differential toxicities of mercury to bacteria and bacteriophages in sea and in lake water
H. BABICH and G. STOTZKY 1252
- Babiuk, L.A.**
Immune control of herpesvirus latency
L.A. BABIUK and B.T. ROUSE 267
- Babiuk, L.A.**
A new plaque system for canine distemper: characteristics of the green strain of canine distemper virus
C.K. HO and L.A. BABIUK 680
- Baldani, V.L.D.**
Selective infection of maize roots by streptomycin-resistant *Azospirillum lipoferum* and other bacteria
JOHANNA DÖBEREINER and VERA LUCIA DIVAN BALDANI 1264
- Baldwin, J.N.**
Transduction of penicillinase production in *Staphylococcus epidermidis* and nature of the genetic determinant
W.C. OLSON, JR., J.T. PARISI, P.A. TOTTEN, and J.N. BALDWIN 508
- Balish, E.**
The mitogenic activity of lipopolysaccharide for spleen cells from germfree, conventional, and gnotobiotic rats
CAROL WELLS and EDWARD BALISH 1087
- Bannatyne, R.M.**
Protective effect of polymyxin B sulfate in experimental enterobacterial infection in mice
ROBERT M. BANNATYNE and ROSE CHEUNG 995
- Barabás, I.**
Phenotypic reversion of nitrogenase in pleiotropic mutants of *Rhizobium meliloti*
ILONA BARABÁS and TIBOR SIK 298
- Barei, G.M.**
The binding of fluorescein-labelled staphylococcal alpha toxoid to erythrocytes
GARY M. BAREI and HUGH B. FACKRELL 1219
- Barnet, Y.M.**
Effect of a bacteriophage on the colonisation and nodulation of clover roots by a strain of *Rhizobium trifolii*
J. EVANS, Y.M. BARNET, and J.M. VINCENT 968
- Barnet, Y.M.**
Effect of a bacteriophage on colonisation and nodulation of clover roots by paired strains of *Rhizobium trifolii*
J. EVANS, Y.M. BARNET, and J.M. VINCENT 974
- Barnet, Y.M.**
Properties of *Rhizobium trifolii* isolates surviving exposure to specific bacteriophage
YVONNE M. BARNET 979
- Barran, L.R.**
Effect of thiols on macroconidia of *Fusarium sulphureum*
LESLIE R. BARRAN and EDWARD F. SCHNEIDER 618
- Barray, S.**
Etude des polypeptides de structure du virus iridescent de *Chilo suppressalis* (Iridovirus type 6)
SYLVIE BARRAY et GERARD DEVAUCHELLE 841
- Bartlett, K.H.**
Aquarium pets as a source of antibiotic-resistant salmonellae
T.J. TRUST and KAREN H. BARTLETT 535
- Bartman, C.D.**
Naphthalenone production in *Aspergillus parvulus*
C.D. BARTMAN and I.M. CAMPBELL 130
- Bartman, C.D.**
Mycophenolic acid production by *Penicillium brevicompactum* in two media
D.L. DOERFLER, C.D. BARTMAN, and I.M. CAMPBELL 940

- Basciano, L.K.**
Spiroplasmas: serological grouping of strains associated with plants and insects
R.E. DAVIS, L.-M. LEE, and L.K. BASCIANO 861
- Basu, A.K.**
Un nouveau sérotype de *Salmonella* isolé au Canada: *Salmonella sherbrooke* (16:d:1,6)
F.M. GOSSELIN, A.K. BASU, T.M. CAPRIOLI et S.S. KASATIYA 1328
- Battreall, C.M.**
Temperature-sensitive mutants of bacteriophage SH-133 specific for the hydrogen bacterium *Pseudomonas facilis*: isolation, complementation, and partial characterization
CHRISTINE M. BATTREALL, WILLIAM E. FRIEDRICH, JEFFREY P. REED, and GARY M. ARON 86
- Beavan, M.J.**
Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 888
- Beavan, M.J.**
Erratum: Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 1489
- Becker, S.A.W.E.**
The fine structure of mature and germinating chlamydospores of *Fusarium oxysporum*
I.L. STEVENSON and S.A.W.E. BECKER 808
- Beckers, H.J.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Behki, R.M.**
Thymidine incorporation into *Rhizobium meliloti*
R.M. BEHKI and S.M. LESLEY 675
- Behrens, M.K.**
Synthesis and excretion of polygalacturonic acid *trans*-eliminase in *Erwinia*, *Yersinia*, and *Klebsiella* species
ARUN K. CHATTERJEE, GORDON E. BUCHANAN, MARY K. BEHRENS, and MORTIMER P. STARR 94
- Belas, M.R.**
Ecology and taxonomy of bacteria attaching to wood surfaces in a tropical harbor
B. AUSTIN, D.A. ALLEN, A. ZACHARY, M.R. BELAS, and R.R. COLWELL 447
- Belk, D.M.**
Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 888
- Belk, D.M.**
Erratum: Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 1489
- Bergstein, T.**
Investigations on the photosynthetic sulfur bacterium *Chlorobium phaeobacteroides* causing seasonal blooms in Lake Kinneret
T. BERGSTEIN, Y. HENIS, and B.Z. CAVARI 999
- Berthiaume, L.**
Bacteriophage-like particles associated with a spirochete
L. BERTHIAUME, Y. ELAZHARY, R. ALAIN, and H.-W. ACKERMANN 114
- Bertrand, J.-C.**
Hydroxylase regulation in *Candida tropicalis* grown on alkanes
MICHÈLE GILEWICZ, MARCELLE ZACEK, JEAN-CLAUDE BERTRAND, and EDGARD AZOULAY 201
- Betts, P.M.**
Thiocyanate utilization by an *Arthrobacter*
P.M. BETTS, D.F. RINDER, and J.R. FLEEKER 1277
- Bianchi, A.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Bianchi, M.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Bishai, F.R.**
Use of antisera against bovine (NCDV) and simian (SA11) rotaviruses in ELISA to detect different types of human rotavirus
F.R. BISHAE, L. SPENCE, D. GOODWIN, and R. PETRO 1118
- Bitton, G.**
Virus detection in soils: a comparison of four recovery methods
GABRIEL BITTON, M. JUDITH CHARLES, and SAMUEL R. FARRAH 874

- Bitton, G.**
Low molecular weight substitutes for beef extract as eluents for poliovirus adsorbed to membrane filters
SAMUEL R. FARRAH and GABRIEL BITTON 1045
- Blanc, F.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Bollag, J.-M.**
Characterization of an enzyme from *Rhizoctonia praticola* which polymerizes phenolic compounds
JEAN-MARC BOLLAG, ROY D. SJOBLAD, and SHU-YEN LIU 229
- Bonin, M.C.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Bordeleau, L.M.**
Effect of oxygen on batch and continuous cultures of a nitrogen-fixing *Arthrobacter* sp.
ISABELLA CACCIARI, DANIELA LIPPI, and LUCIEN M. BORDELEAU 746
- Boudreault, A.**
Live influenza vaccine: screening of attenuated virus strains by a 50% ciliary activity inhibition test in organ cultures of ferret trachea
A. BOUDREAU 279
- Boutibonnes, P.**
A propos de l'activité antibactérienne de la zéaralénone
P. BOUTIBONNES 421
- Brailovsky, C.A.**
Influence de la longueur de la chaîne saccharidique des lipopolysaccharides bactériens sur la stimulation du système immunitaire
R. LALLIER, V.N. NIGAM et C.A. BRAILOVSKY 640
- Brindle, Y.**
Investigation of antibodies against *Fasciola hepatica* in moose
Alces americana
YVES BRINDLE, ROBERT LETARTE, and JOCELYNE GAGNON 788
- Brodeur, B.**
Induction of reaginic (IgE) gonococcal antibodies in the rat by a common antigen of *Neisseria gonorrhoeae*
F.E. ASHTON, H.M. VIJAY, G. LAVERGNE, B. BRODEUR, and B.B. DIENA 138
- Bromke, B.J.**
Regulation of extracellular protease formation by *Serratia marcescens*
BRUNO J. BROMKE and JAY M. HAMMEL 47
- Buchanan, G.E.**
Synthesis and excretion of polygalacturonic acid *trans*-eliminase in *Erwinia*, *Yersinia*, and *Klebsiella* species
ARUN K. CHATTERJEE, GORDON E. BUCHANAN, MARY K. BEHRENS, and MORTIMER P. STARR 94
- Burton, D.N.**
Effects of oxygen tension on the lipid composition of *Azotobacter chroococcum*
EDWARD B. RECZEK and D.N. BURTON 1239
- Bussard, J.B.**
Nitrogen-metabolizing enzymes of *Diplodia maydis*, a *Zea mays* L. stalk rot causing fungus
JAMES B. BUSSARD and RUSSELL L. LARSON 167
- Cacciari, I.**
Effect of oxygen on batch and continuous cultures of a nitrogen-fixing *Arthrobacter* sp.
ISABELLA CACCIARI, DANIELA LIPPI, and LUCIEN M. BORDELEAU 746
- Campbell, I.M.**
Naphthalenone production in *Aspergillus parvulus*
C.D. BARTMAN and I.M. CAMPBELL 130
- Campbell, I.M.**
Mycophenolic acid production by *Penicillium brevicompactum* in two media
D.L. DOERFLER, C.D. BARTMAN, and I.M. CAMPBELL 940
- Campbell, J.B.**
Effect of serum antigen incubation times on the expression of non-specific inhibitors of rubella hemagglutination
JAMES B. CAMPBELL 103
- Caprioli, T.M.**
Un nouveau sérotype de *Salmonella* isolé au Canada: *Salmonella sherbrooke* (16:d:1,6)
F.M. GOSSELIN, A.K. BASU, T.M. CAPRIOLI et S.S. KASATIYA 1328
- Carels, M.**
The effect of changes in pH on phosphate and potassium uptake by *Monascus rubiginosus* ATCC 16367 in submerged shaken culture
MARIETTE CARELS and DAVID SHEPHERD 1484
- Carpenter, M.**
Biochemical studies on pili isolated from *Pseudomonas aeruginosa* strain PAO
W. PARANCHYCH, P.A. SASTRY, L.S. FROST, M. CARPENTER, G.D. ARMSTRONG, and T.H. WATTS 1175
- Carstens, E.B.**
A dominant temperature-sensitive assembly mutant of adenovirus type 2
ERIC B. CARSTENS, JOHANNE MAGNAN, and JOSEPH WEBER 646
- Casida, L.E., Jr.**
Minute tubular forms in soil
L.E. CASIDA, JR., and KANG-CHIEN LIU 722

- Cavari, B.Z.**
Investigations on the photosynthetic sulfur bacterium *Chlorobium phaeobacteroides* causing seasonal blooms in Lake Kinneret
T. BERGSTEIN, Y. HENIS, and B.Z. CAVARI 999
- Chahal, D.S.**
Bioconversion of wheat straw and wheat straw components into single-cell protein
D. S. CHAHAL, M. MOO-YOUNG, and G.S. DHILLON 793
- Chai, T.**
Isolation and characterization of isogenic *E. coli* strains with alterations in the level of one or more major outer membrane proteins
JOHN FOULDS and TUU-JYI CHAI 423
- Chambers, L.A.**
Thiosulfate formation and associated isotope effects during sulfite reduction by *Clostridium Pasteurianum*
L.A. CHAMBERS and P.A. TRUDINGER 719
- Champalbert, G.**
Etude de l'évolution des populations bactériennes d'origine tellurique, entérique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARTEL, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRILL, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Chan, L.C.**
The extraction and analysis of lipopolysaccharides from *Pseudomonas aeruginosa* strain PAO, and three rough mutants
ANDREW M. KROPINSKI, L.C. CHAN, and F.H. MILAZZO 390
- Chansang, H.**
Mannose transport in *Amphora Coffeaeformis* var. *perpusilla* (Bacillariophyceae)
HANSA CHANSANG and KEITH E. COCKSEY 605
- Chantler, J.K.**
Model systems for analysis of latent cytomegalovirus infections
J.B. HUDSON, J.K. CHANTLER, L. LOH, V. MISRA, and M.T. MULLER 245
- Charles, M.J.**
Virus detection in soils: a comparison of four recovery methods
GABRIEL BITTON, M. JUDITH CHARLES, and SAMUEL R. FARRAH 874
- Chatterjee, A.K.**
Synthesis and excretion of polygalacturonic acid *trans*-eliminase in *Erwinia*, *Yersinia*, and *Klebsiella* species
ARUN K. CHATTERJEE, GORDON E. BUCHANAN, MARY K. BEHRENS, and MORTIMER P. STARR 94
- Chaudhary, R.K.**
Measurement of antibodies to rabies virus by immunoelectron microscopy
R.K. CHAUDHARY, H.C. CHO, and M.T. MONETTE 1209
- Cheng, K.J.**
Production of alkaline phosphatase by epithelial cells and adherent bacteria of the bovine rumen and abomasum
J.P. FAY, K.J. CHENG, and J.W. COSTERTON 932
- Cheung, R.**
Protective effect of polymyxin B sulfate in experimental enterobacterial infection in mice
ROBERT M. BANNATYNE and ROSE CHEUNG 995
- Chia, W.K.**
Quantitative determination of cytomegalovirus IgG antibody by enzyme-linked immunosorbent assay (ELISA)
W.K. CHIA and L. SPENCE 1082
- Child, J.J.**
Fatty acid composition of *Rhizobium* spp.
S.L. MACKENZIE, M.S. LAPP, and J.J. CHILD 68
- Child, J.J.**
Nitrogen fixation by *Rhizobium* sp. 32H1. A morphological and ultrastructural comparison of symbiotic and nitrogen-fixing forms
A.A.N. VAN BRUSSEL, J.W. COSTERTON, and J.J. CHILD 352
- Child, J.J.**
Bacterial utilization of a hydrazine derivative as nitrogen source for growth
T.A. LARUE and J.J. CHILD 822
- Cho, H.C.**
Measurement of antibodies to rabies virus by immunoelectron microscopy
R.K. CHAUDHARY, H.C. CHO, and M.T. MONETTE 1209
- Chopin, A.**
Addendum: Survie de *Staphylococcus aureus* au cours de la préparation et de la conservation de lait écrémé en poudre. Problèmes posés par le dénombrement des survivants
A. CHOPIN, SILVIA TESONE, J.-P. VILA, Y. LE GRAET et G. MOCQUOT 237
- Clement, R.**
Etude expérimentale du transfert de *Vibrio parahaemolyticus* (biotype 2) de l'eau et des sédiments aux organismes des chaînes alimentaires benthiques marines
M.J. GAUTHIER et R. CLEMENT 499
- Colvin, J.R.**
Spheroplasts of *Methanospirillum hungatii* formed upon treatment with dithiothreitol
G.D. SPROTT, J.R. COLVIN, and R.C. MCKELLAR 730
- Colvin, J.R.**
The ultrastructure of the major species of an enriched methanogenic culture utilizing acetic acid
J. ROSS COLVIN, L.C. SOWDEN, and L. VAN DEN BERG 826
- Colwell, R.R.**
Ecology and taxonomy of bacteria attaching to wood surfaces in a tropical harbor
B. AUSTIN, D.A. ALLEN, A. ZACHARY, M.R. BELAS, and R.R. COLWELL 447
- Compton, S.W.**
DNA base composition, nature of intracellular DNA, morphology, and classification of bacteriophages infecting *Micrococcus luteus*
SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH, H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and J.V. SCALETTI 1027

- Cooksey, K.E.**
Mannose transport in *Amphora Coffeaeformis* var. *perpusilla* (Bacillariophyceae)
HANSA CHANSANG and KEITH E. COOKSEY 605
- Cooksey, K.E.**
Asparagine metabolism and asparaginase activity in a euryhaline *Chlamydomonas* species
JOHN H. PAUL and KEITH E. COOKSEY 1443
- Coote, J.G.**
Degradation of bacterial lipopolysaccharide by the slime mould *Physarum polycephalum*
JOHN N. SADDLER, JOHN G. COOTE, and ALASTAIR C. WARDLAW 124
- Cords, C.E.**
DNA base composition, nature of intracellular DNA, morphology, and classification of bacteriophages infecting *Micrococcus luteus*
SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH, H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and J.V. SCALETTI 1027
- Corke, C.T.**
Influence of soybean inoculation and nitrogen levels on populations and serogroups of *Rhizobium japonicum* in Ontario
ERNEST SEMU, D.J. HUME, and C.T. CORKE 739
- Corke, C.T.**
The effect of nickel on the growth, photosynthesis, and nitro-genase activity of *Anabaena inaequalis*
GLENN W. STRATTON and CHARLES T. CORKE 1094
- Costerton, J.W.**
Nitrogen fixation by *Rhizobium* sp. 32H1. A morphological and ultrastructural comparison of asymbiotic and symbiotic nitrogen-fixing forms
A.A.N. VAN BRUSSEL, J.W. COSTERTON, and J.J. CHILD 352
- Costerton, J.W.**
Structural and biochemical examination of ghosts derived from a deep rough (heptose-deficient lipopolysaccharide) strain and a smooth strain of *Escherichia coli*
R.T. IRVIN, J. LAM, and J.W. COSTERTON 436
- Costerton, J.W.**
Production of alkaline phosphatase by epithelial cells and adherent bacteria of the bovine rumen and abomasum
J.P. FAY, K.J. CHENG, and J.W. COSTERTON 932
- Costerton, J.W.**
Microbiology of a northern river: bacterial distribution and relationship to suspended sediment and organic carbon
G.G. GEESEY and J.W. COSTERTON 1058
- Cotter, D.A.**
The physiological effects of restrictive environmental conditions on *Dictyostelium discoideum* spore germination
DAVID A. COTTER, FREDERICK J. GARNISH, and LOUIS S. TISA 24
- Coupal, B.**
Utilization of seawater-urea as a culture medium for *Spirulina maxima*
ONIL FAUCHER, BERNARD COUPAL, and ANH LEDUY 752
- Courtois, B.**
Effet de la synthèse d'acide 2 ceto-gluconique sur la production d'exopolysaccharides par une souche de *Rhizobium meliloti*
B. COURTOIS, J.P. HORNEZ et J.C. DERIEUX 1191
- Crawford, D.L.**
Isolation of lignocellulose-decomposing actinomycetes and degradation of specifically ¹⁴C-labeled lignocelluloses by six selected *Streptomyces* strains
MARY BETH PHELAN, DON L. CRAWFORD, and ANTHONY L. POMETTO III 1270
- Crosa, J.H.**
Deoxyribonucleic acid relationships among members of the genus *Aeromonas*
JAN I. MACINNES, TREVOR J. TRUST, and JORGE H. CROSA 579
- Crosa, J.H.**
Erratum: Deoxyribonucleic acid relationships among members of the genus *Aeromonas*
JAN I. MACINNES, TREVOR J. TRUST, and JORGE H. CROSA 1489
- Cubizolles, F.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Cullen, W.R.**
The transformation of arsenicals by *Candida humicola*
WILLIAM R. CULLEN, BARRY C. MCBRIDE, and A. WENDY PICKETT 1201
- Cunfer, B.M.**
Effect of irradiance upon the population of *Pseudomonas coronafaciens* in leaves and symptom expression of halo blight of rye
BARRY M. CUNFER and JOHN YOUNANS 163
- Daigneault-Sylvestre, N.**
Method for the rapid screening of cellulolytic streptomycetes and their mutants
N. DAIGNEAULT-SYLVESTRE and D. KLUEPFEL 858
- David, P.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073

- Davidson, C.M.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Davidson, E.W.**
Ultrastructure of midgut events in the pathogenesis of *Bacillus sphaericus* strain SSII-1 infections of *Culex pipiens quinquefasciatus* larvae
ELIZABETH WEST DAVIDSON 178
- Davidson, E.W.**
Comparative studies of the mosquito-larval toxin of *Bacillus sphaericus* SSII-1 and 1593
PAULA MYERS, ALLAN A. YOSTEN, and ELIZABETH W. DAVIDSON 1227
- Davies, J.S.**
Crude oil utilization by fungi
J.S. DAVIES and D.W.S. WESTLAKE 146
- Davis, R.E.**
Spiroplasmas: serological grouping of strains associated with plants and insects
R.E. DAVIS, I.-M. LEE, and L.K. BASCIANO 861
- Day, S.**
Evaluation of an improved rapid coagglutination method for the serological grouping of beta-hemolytic streptococci
DANIEL V. LIM, ROSELLA D. SMITH, and SUSAN DAY 40
- De Leeuw, G.T.N.**
Scanning electron microscopy of *Acholeplasma* colonies on agar
ANNA A. POLAK-VOGELZANG, ROBERT A. SAMSON, and GERARD T.N. DE LEEUW 1373
- Delgado, J.M.**
Optimization on the selection of auxotrophic mutants in *Candida utilis* by snail enzyme treatment
J.M. DELGADO, L.S. HERRERA, C. PÉREZ, and R. LÓPEZ 486
- Demain, A.L.**
Nitrogen nutrition and regulation of cephalosporin production in *Streptomyces clavuligerus*
YAIR AHARONOWITZ and ARNOLD L. DEMAİN 61
- deRepentigny, J.**
Increase in the in vitro susceptibility of *Staphylococcus aureus* to antimicrobial agents in the presence of *Candida albicans*
J. DEREPENTIGNY, R. LÉVESQUE, and L.G. MATHIEU 429
- Derieux, J.C.**
Effet de la synthèse d'acide 2 ceto-gluconique sur la production d'exopolysaccharides par une souche de *Rhizobium meliloti*
B. COURTOIS, J.P. HORNEZ et J.C. DERIEUX 1191
- Desmarchelier, P.**
ICMSF methods studies. XII. Comparative study for the enumeration of *Clostridium perfringens* in feces
A.H.W. HAUSCHILD, P. DESMACHELIER, R.J. GILBERT, S.M. HARMON, and R. VAHLEFELD 953
- DeVauchelle, G.**
Etude des polypeptides de structure du virus iridescent de *Chilo suppressalis* (Iridovirus type 6)
SYLVIE BARRAY et GERARD DEVAUCHELLE 841
- Dhillon, G.S.**
Bioconversion of wheat straw and wheat straw components into single-cell protein
D. S. CHAHAL, M. MOO-YOUNG, and G.S. DHILLON 793
- Diena, B.B.**
Induction of reaginic (IgE) gonococcal antibodies in the rat by a common antigen of *Neisseria gonorrhoeae*
F.E. ASHTON, H.M. VIJAY, G. LAVERGNE, B. BRODEUR, and B.B. DIENA 138
- Diena, B.B.**
Evaluation of the antiserum agar method for the serogroup identification of *Neisseria meningitidis*
F.E. ASHTON, A. RYAN, B.B. DIENA, and C.E. FRASCH 784
- Din, G.A.**
The effect of pantothenate on sulfate metabolism and sulfur isotope fractionation by *Saccharomyces cerevisiae*
R.G.L. MCCREADY, G.A. DIN, and H.R. KROUSE 1139
- Döbereiner, J.**
Selective infection of maize roots by streptomycin-resistant *Azospirillum lipoferum* and other bacteria
JOHANNA DÖBEREINER and VERA LUCIA DIVAN BALDANI 1264
- Dobson, W.J.**
The function of fimbriae in *Myxococcus xanthus*. I. Purification and properties of *M. xanthus* fimbriae
W.J. DOBSON and H.D. MCCURDY 1152
- Dobson, W.J.**
The function of fimbriae in *Myxococcus xanthus*. II. The role of fimbriae in cell-cell interactions
W.J. DOBSON, H.D. MCCURDY, and T.H. MACRAE 1359
- Dodson, E.O.**
Crossing the procaryote-eucaryote border: endosymbiosis or continuous development?
EDWARD O. DODSON 651
- Dodsworth, P.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Doerfler, D.L.**
Mycophenolic acid production by *Penicillium brevicompactum* in two media
D.L. DOERFLER, C.D. BARTMAN, and I.M. CAMPBELL 940
- Dorland, R.B.**
Protection of mammalian cells from diphtheria toxin by exogenous nucleotides
JOHN L. MIDDLEBROOK and REBECCA B. DORLAND 285

- Drobnica, L.**
Effect of glycerol on viability and other properties of starved *Mycobacterium fortuitum*
V. MAJTÁN and L. DROBNICA 600
- Durand, M.**
Nutrition carbonée et étude taxonomique de *Bacillus subtilis* et *B. licheniformis*
M. DURAND, F. PICHINOTY, C. JOB et M. MANDEL 491
- Durbec, J. P.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANÇOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Durston, A.J.**
Evidence for chemotaxis during sexual development in *Dictyostelium discoideum*
DANTON H. O'DAY and ANTONY J. DURSTON 542
- Dutka, B.J.**
The occurrence of *Candida albicans* in Lake Ontario bathing beaches
J.P. SHERRY, S.R. KUCHMA, and B.J. DUTKA 1036
- Dworkin, M.**
A method for establishing stable concentration gradients in agar suitable for studying chemotaxis on a solid surface
LAWRENCE J. SHIMKETS, MARTIN DWORKIN, and KENNETH H. KELLER 1460
- Eagon, R.G.**
The effect of phenazine methosulfate-ascorbate on bacterial active transport and adenosine triphosphate formation: inhibition of *Pseudomonas aeruginosa* and stimulation of *Escherichia coli*
R.G. EAGON, T.W. HODGE, III, J.B. RAKE, and J.M. YARBROUGH 798
- Egan, A.F.**
Enumeration of stressed cells of *Escherichia coli*
AUBREY F. EGAN 116
- Ehrlich, M.**
DNA base composition, nature of intracellular DNA, morphology, and classification of bacteriophages infecting *Micrococcus luteus*
SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH, H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and J.V. SCALETTI 1027
- Eidus, L.**
Differentiation of rapidly growing mycobacteria with Trimethoprim (Tnp)
A. LASZLO and L. EIDUS 991
- Eklund, S.K.**
Release of β -glucuronidase from peritoneal macrophages of normal and endotoxin-tolerant mice
STEPHEN L. SNYDER, SHARYN K. EKLUND, and RICHARD I. WALKER 1245
- Elazhary, Y.**
Bacteriophage-like particles associated with a spirochete
L. BERTHIAUME, Y. ELAZHARY, R. ALAIN, and H.-W. ACKERMANN 114
- El Dere, H.B.**
Effect of non-fat dry milk on recovery of staphylococcal thermoluciferase from foods
C.E. PARK, H.B. EL DERE, and M.K. RAYMAN 44
- Emyanito, R.G.**
The effects of temperature, incubation, atmosphere, and medium composition on arthrospore formation in the fungus *Trichophyton mentagrophytes*
RUTH G. EMYANITOFF and TADAYO HASHIMOTO 362
- Evans, J.**
Effect of a bacteriophage on the colonisation and nodulation of clover roots by a strain of *Rhizobium trifolii*
J. EVANS, Y.M. BARNET, and J.M. VINCENT 968
- Evans, J.**
Effect of a bacteriophage on colonisation and nodulation of clover roots by paired strains of *Rhizobium trifolii*
J. EVANS, Y.M. BARNET, and J.M. VINCENT 974
- Fackrell, H.B.**
Immunologic evidence that staphylococcal alpha toxin is oriented on membranes
C.Y. LO and H.B. FACKRELL 686
- Fackrell, H.B.**
The binding of fluorescein-labelled staphylococcal alpha toxoid to erythrocytes
GARY M. BAREI and HUGH B. FACKRELL 1219
- Farrah, S.R.**
Virus detection in soils: a comparison of four recovery methods
GABRIEL BITTON, M. JUDITH CHARLES, and SAMUEL R. FARRAH 874
- Farrah, S.R.**
Low molecular weight substitutes for beef extract as eluents for poliovirus adsorbed to membrane filters
SAMUEL R. FARRAH and GABRIEL BITTON 1045
- Faucher, O.**
Utilization of seawater-urea as a culture medium for *Spirulina maxima*
ONIL FAUCHER, BERNARD COUPAL, and ANH LEDUY 752
- Fay, J.P.**
Production of alkaline phosphatase by epithelial cells and adherent bacteria of the bovine rumen and abomasum
J.P. FAY, K.J. CHENG, and J.W. COSTERTON 932
- Ferguson, C.A.**
Effects of some platinum IV complexes on cell division of *Escherichia coli*
C.A. FERGUSON, R.G.E. MURRAY, and P. LANCY, JR. 545
- Ferraro, F.M.**
In vitro attachment of *Treponema hyodysenteriae* to mammalian epithelial cells
FLOYD C. KNOOP, GORDON D. SCHRANK, and FRANK M. FERRARO 399

- Ferroni, G.D.**
Quantitative ecology of psychrophilic bacteria in an aquatic environment and characterization of heterotrophic bacteria from permanently cold sediments
L.G. LEDUC and G.D. FERRONI 1433
- Finnerty, W.R.**
Age-related physiological studies comparing *Candida albicans* chlamydospores to yeasts
SARA E. MILLER and W.R. FINNERTY 765
- Fitzgerald, J.W.**
Evidence for a periplasmic location in *Comamonas terrigena* of the inducible tyrosine sulfate sulfohydrolase
H. WILLIAM MACA and JOHN W. FITZGERALD 275
- Fitzgerald, J.W.**
Effect of divalent cations on the inhibition of alkyl-sulfatase induction and the generation of ATP in *Pseudomonas aeruginosa* after exposure to exogenous uridine 5'-triphosphate
GREGORY J. STEWART and JOHN W. FITZGERALD 1008
- Fleeker, J.R.**
Thiocyanate utilization by an *Arthrobacter*
P.M. BETTS, D.F. RINDER, and J.R. FLEEKER 1277
- Forsberg, C.W.**
Chlortetracycline and sulfonamide resistance of fecal bacteria in swine receiving medicated feed
B. WELCH and C.W. FORSBERG 789
- Foulds, J.**
Isolation and characterization of isogenic *E. coli* strains with alterations in the level of one or more major outer membrane proteins
JOHN FOULDS and TUU-JYI CHAI 423
- Francis, J.C.**
Phosphate uptake in chemostat cultures of *Escherichia coli* K-12 subjected to periodic β -glycerophosphate pulsing: a system for assaying alkaline phosphatase
J.C. FRANCIS and S.L. KING 560
- Francis, M.M.**
Biosynthesis of chloramphenicol in *Streptomyces* species 3022a: the nature of the arylamine synthetase system
M.M. FRANCIS and D.W.S. WESTLAKE 1408
- Francois, A.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Frasch, C.E.**
Evaluation of the antiserum agar method for the serogroup identification of *Neisseria meningitidis*
F.E. ASHTON, A. RYAN, B.B. DIENA, and C.E. FRASCH 784
- Friedrichs, W.E.**
Temperature-sensitive mutants of bacteriophage SH-133 specific for the hydrogen bacterium *Pseudomonas facilis*: isolation, complementation, and partial characterization
CHRISTINE M. BATTREALL, WILLIAM E. FRIEDRICHs, JEFFREY P. REED, and GARY M. ARON 86
- Frost, L.S.**
Biochemical studies on pili isolated from *Pseudomonas aeruginosa* strain PAO
W. PARANCHYCH, P.A. SASTRY, L.S. FROST, M. CARPENTER, G.D. ARMSTRONG, and T.H. WATTS 1175
- Gagnon, J.**
Investigation of antibodies against *Fasciola hepatica* in moose *Alces americana*
YVES BRINDLE, ROBERT LETARTE, and JOCELYNE GAGNON 788
- Galsworthy, S.B.**
Stimulation of monocyte precursors *in vivo* by an extract from *Listeria monocytogenes*
D.T. SHUM and S.B. GALSORTHY 698
- Galsworthy, S.B.**
Immunological properties of partially purified material with monocytoxis-producing activity from *Listeria monocytogenes*
T.V. OTOKUNEFOR, D.T. SHUM, and S.B. GALSORTHY 706
- Garcia Mendoza, C.**
Studies of the spore walls of *Agaricus bisporus* and *Agaricus campestris*
C. GARCIA MENDOZA, J.A. LEAL, and M. NOVAES-LEDIEU 32
- Gardner, W.J.E.**
Isolation and characterisation of guanine auxotrophs in *Saccharomyces cerevisiae*
W.J.E. GARDNER and R.A. WOODS 380
- Garnish, F.J.**
The physiological effects of restrictive environmental conditions on *Dictyostelium discoideum* spore germination
DAVID A. COTTER, FREDERICK J. GARNISH, and LOUIS S. TISA 24
- Gaucher, G.M.**
Patulin biosynthesis: the metabolism of phyllostine and isoeopoxynon by cell-free preparations from *Penicillium urticae*
JUNICHI SEKIGUCHI and G. MAURICE GAUCHER 881
- Gauthier, M.J.**
Etude expérimentale du transfert de *Vibrio parahaemolyticus* (biotype 2) de l'eau et des sédiments aux organismes des chaînes alimentaires benthiques marines
M.J. GAUTHIER et R. CLEMENT 499
- Gavini, F.**
Etude d'un groupe nouveau d'Enterobacteriaceae (groupe H₁) apparenté à l'espèce *Enterobacter cloacae*
D. IZARD, F. GAVINI, P.A. TRINEL et H. LECLERC 713
- Geesey, G.G.**
Microbiology of a northern river: bacterial distribution and relationship to suspended sediment and organic carbon
G.G. GEESEY and J.W. COSTERTON 1058

- George, H.A.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. II. Role of exogenous superoxide anions and hydrogen peroxide
PAUL S. HOFFMAN, HUGH A. GEORGE, NOEL R. KRIEG, and ROBERT M. SMIBERT 8
- Gilbert, R.J.**
ICMSF methods studies. XII. Comparative study for the enumeration of *Clostridium perfringens* in feces
A.H.W. HAUSCHILD, P. DESMARCHELIER, R.J. GILBERT, S.M. HARMON, and R. VAHLEFELD 953
- Gilewicz, M.**
Hydroxylase regulation in *Candida tropicalis* grown on alkanes
MICHÈLE GILEWICZ, MARCELLE ZACEK, JEAN-CLAUDE BERTRAND, and EDGARD AZOULAY 201
- Gingell, B.**
The role of temperature bacteriophage SP β in phage-mediated interference in *Bacillus subtilis*
CARL W. RETTENMIER, BARRY GINGELL, and H. ERNEST HEMPHILL 1345
- Giroux, J.G.**
Properties of malate dehydrogenase isolated from *Methanospirillum hungatii*
G.D. SPROTT, R.C. MCKELLAR, K.M. SHAW, J.G. GIROUX, and W.G. MARTIN 192
- Gonder, J.C.**
Suppression of PHA-stimulated lymphocyte transformation in cynomolgus monkeys following infection with *Coxiella burnetii*
R.A. KISHIMOTO and J.C. GONDER 949
- Goodwin, D.**
Use of antisera against bovine (NCDV) and simian (SA11) rotaviruses in ELISA to detect different types of human rotavirus
F.R. BISHAE, L. SPENCE, D. GOODWIN, and R. PETRO 1118
- Gosselin, F.M.**
Un nouveau sérotype de *Salmonella* isolé au Canada: *Salmonella sherbrooke* (16:d:1,6)
F.M. GOSSELIN, A.K. BASU, T.M. CAPRIOLI et S.S. KASATHYA 1328
- Gouet, P.**
Induction et repression de la synthèse de collagénase chez *Acinetobacter* sp.
JEAN-CLAUDE MONBOISSE, JEAN LABADIE et PHILIPPE GOUET 611
- Goulet, J.**
A simple device for uniform inoculation of nutrient surfaces
J. GOULET, G. LEVESQUE, and J.R. MOREAU 1111
- Gourlie, M.P.**
Release of rhodanese from *Pseudomonas aeruginosa* by cold shock and its localization within the cell
R.W. RYAN, M.P. GOURLIE, and R.C. TILTON 340
- Graham, P.J.**
Low temperature induces decreased germinability of *Cylindroclostridium microsclerotia*
DON A. ROTH, GARY J. GRIFFIN, and PHILIP J. GRAHAM 157
- Greenberg, S.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. MCLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Griffin, G.J.**
Low temperature induces decreased germinability of *Cylindroclostridium microsclerotia*
DON A. ROTH, GARY J. GRIFFIN, and PHILIP J. GRAHAM 157
- Gross, D.C.**
Bacteriocins of phytopathogenic *Corynebacterium* species
D.C. GROSS and A.K. VIDAVER 367
- Groves, D.J.**
Interspecific relationships of antibiotic resistance in *Staphylococcus* sp.: isolation and comparison of plasmids determining tetracycline resistance in *S. aureus* and *S. epidermidis*
DAVID J. GROVES 1468
- Groves, D.J.**
A temperature-gradient technique for the elimination of antibiotic resistance
DAVID J. GROVES 1476
- Gupta, M.**
The influence of cations on the permeability of the outer membrane of *Salmonella typhimurium* and other gram-negative bacteria
H. STAN-LOTTER, M. GUPTA, and K.E. SANDERSON 475
- Haidaris, C.G.**
Experimental studies of the pathogenesis of infections due to *Pseudomonas aeruginosa*: extracellular protease and elastase as *in vivo* virulence factors
IAN ALAN HOLDER and CONSTANTINE G. HAIDARIS 593
- Hammel, J.M.**
Regulation of extracellular protease formation by *Serratia marcescens*
BRUNO J. BROMKE and JAY M. HAMMEL 47
- Hankin, L.**
Effect of additions of liquid poultry manure on excretion of degradative enzymes by bacteria in forest soil and litter
LESTER HANKIN, GEORGE R. STEPHENS, and DAVID E. HILL 1258
- Hardisson, C.**
Induction of β -galactosidase in *Streptomyces violaceus*
JESUS SANCHEZ and CARLOS HARDISSON 833
- Harmon, S.M.**
ICMSF methods studies. XII. Comparative study for the enumeration of *Clostridium perfringens* in feces
A.H.W. HAUSCHILD, P. DESMARCHELIER, R.J. GILBERT, S.M. HARMON, and R. VAHLEFELD 953

- Hashimoto, T.**
The effects of temperature, incubation, atmosphere, and medium composition on arthrospore formation in the fungus *Trichophyton mentagrophytes*
RUTH G. EMYANITOFF and TADAYO HASHIMOTO 362
- Hauschild, A.H.W.**
Inhibitory effect of cocoa powder on the growth of a variety of bacteria in different media
C.E. PARK, Z.K. STANKIEWICZ, M.K. RAYMAN, and A.H.W. HAUSCHILD 233
- Hauschild, A.H.W.**
ICMSF methods studies. XII. Comparative study for the enumeration of *Clostridium perfringens* in feces
A.H.W. HAUSCHILD, P. DESMARCHELIER, R.J. GILBERT, S.M. HARMON, and R. VAHLEFELD 953
- Hauschild, A.H.W.**
A modified pork plasma agar for the enumeration of *Staphylococcus aureus* in foods
A.H.W. HAUSCHILD, C.E. PARK, and R. HILSHEIMER 1052
- Hawirko, R.Z.**
Outgrowth and sporulation studies on *Clostridium botulinum* type E: influence of isoleucine
R.Z. HAWIRKO, C.A. NACCARATO, R.P.W. LEE, and P.Y. MAEBA 522
- Hayashi, M.**
Regulation of internal solute concentrations of marine *Vibrio alginolyticus* in response to external NaCl concentration
TSUTOMU UNEMOTO and MAKI HAYASHI 922
- Hayles, L.B.**
Cache Valley virus: isolations from mosquitoes in Saskatchewan, 1972-1974
J.O. IVERSEN, R.J. WAGNER, M.K. LEUNG, L.B. HAYLES, and J.R. MCINTOCK 760
- Heberlein, G.T.**
Polymyxin resistance in *Agrobacterium tumefaciens* and its effect on crown gall tumor induction
C.H. LIAO and G.T. HEBERLEIN 185
- Hemphill, H.E.**
The role of temperature bacteriophage SP β in phophage-mediated interference in *Bacillus subtilis*
CARL W. RETTENMIER, BARRY GINGELL, and H. ERNEST HEMPHILL 1345
- Hendry, A.T.**
Auxanographic grouping and typing of *Neisseria gonorrhoeae*
A.T. HENDRY and I.O. STEWART 512
- Hendry, A.T.**
Silver-resistant enterobacteriaceae from hospital patients
A.T. HENDRY and I.O. STEWART 915
- Henis, Y.**
Investigations on the photosynthetic sulfur bacterium *Chlorobium phaeobacteroides* causing seasonal blooms in Lake Kinneret
T. BERGSTEIN, Y. HENIS, and B.Z. CAVARI 999
- Herr, L.J.**
Superiority of a soil debris isolatin method over a beet seed colonization method for assay of *Rhizoctonia solani* at high soil inoculum densities
D.L. ROBERTS and L.J. HERR 110
- Herr, L.J.**
Soil populations of *Rhizoctonia solani* from areas of healthy and diseased beets within four sugarbeet fields differing in soil texture
D.L. ROBERTS and L.J. HERR 902
- Herrera, L.S.**
Optimization on the selection of auxotrophic mutants in *Candida utilis* by snail enzyme treatment
J.M. DELGADO, L.S. HERRERA, C. PÉREZ, and R. LÓPEZ 486
- Hill, D.E.**
Effect of additions of liquid poultry manure on excretion of degradative enzymes by bacteria in forest soil and litter
LESTER HANKIN, GEORGE R. STEPHENS, and DAVID E. HILL 1258
- Hilsheimer, R.**
A modified pork plasma agar for the enumeration of *Staphylococcus aureus* in foods
A.H.W. HAUSCHILD, C.E. PARK, and R. HILSHEIMER 1052
- Hirschfield, B.J.**
Evidence of a competitive hierarchy among coprophilous fungal populations
DONALD T. WICKLOW and B.J. HIRSCHFIELD 855
- Ho, C.K.**
A new plaque system for canine distemper: characteristics of the green strain of canine distemper virus
C.K. HO and L.A. BABIUK 680
- Ho, J.**
Demonstration of positive chemotaxis to cyclic GMP and 5'-AMP in *Myxococcus xanthus* by means of a simple apparatus for generating practically stable concentration gradients
J. HO and H.D. MCCURDY 1214
- Hodge, T.W. III**
The effect of phenazine methosulfate-ascorbate on bacterial active transport and adenosine triphosphate formation: inhibition of *Pseudomonas aeruginosa* and stimulation of *Escherichia coli*
R.G. EAGON, T.W. HODGE, III, J.B. RAKE, and J.M. YARBROUGH 798
- Hoffman, P.S.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. I. Physiological aspects of enhanced aerotolerance
PAUL S. HOFFMAN, NOEL R. KRIEG, and ROBERT M. SMIBERT 1
- Hoffman, P.S.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. II. Role of exogenous superoxide anions and hydrogen peroxide
PAUL S. HOFFMAN, HUGH A. GEORGE, NOEL R. KRIEG, and ROBERT M. SMIBERT 8
- Hofherr, L.**
A broth-disc technique for the assay of antibiotic synergism
MARGARET MEYER and LOUISE HOFHERR 1232

- Holbein, B.E.**
Transport of *Neisseria meningitidis* cultures: growth-supporting media and freezing as an alternative
L.A. WHITE, B.E. HOLBEIN, and M.R. SPENCE 119
- Holbein, B.E.**
Trypsin-uncoupled synthesis and secretion of yeast invertase: implications for the mechanism of secretion
BRUCE E. HOLBEIN and DENIS K. KIDBY 528
- Holder, I.A.**
Experimental studies of the pathogenesis of infections due to *Pseudomonas aeruginosa*: extracellular protease and elastase as *in vivo* virulence factors
IAN ALAN HOLDER and CONSTANTINE G. HAIDARIS 593
- Holder, I.A.**
Enhancement of tissue damage by *Candida albicans* in cortisone or nitrogen mustard-treated mice
DONNA L. OBLACK, JAN SCHWARTZ, and IAN ALAN HOLDER
- Hollis, C.A.**
Mycelial lipids as an aid in identification of *Cronartium fusiforme*
J.D. WHITE, W.D. KELLEY, and C.A. HOLLIS
- Hollis, J.J., Jr.**
An *in vitro* comparison of some biochemical and biological properties of California and Morocco isolates of *Spiroplasma citri*
E.C.K. IGWEGBE, CLAUZELL STEVENS, and JOHN J. HOLLIS, JR. 1125
- Hornez, J.P.**
Effet de la synthèse d'acide 2 ceto-gluconique sur la production d'exopolysaccharides par une souche de *Rhizobium meliloti*
B. COURTOIS, J.P. HORNEZ et J.C. DERIEUX 1191
- Hudson, J.B.**
Model systems for analysis of latent cytomegalovirus infections
J.B. HUDSON, J.K. CHANTLER, L. LOH, V. MISRA, and M.T. MULLER 245
- Hume, D.J.**
Influence of soybean inoculation and nitrogen levels on populations and serogroups of *Rhizobium japonicum* in Ontario
ERNEST SEMU, D.J. HUME, and C.T. CORKE 739
- Igwegbe, E.C.K.**
An *in vitro* comparison of some biochemical and biological properties of California and Morocco isolates of *Spiroplasma citri*
E.C.K. IGWEGBE, CLAUZELL STEVENS, and JOHN J. HOLLIS, JR. 1125
- Irvin, R.T.**
Structural and biochemical examination of ghosts derived from a deep rough (heptose-deficient lipopolysaccharide) strain and a smooth strain of *Escherichia coli*
R.T. IRVIN, J. LAM, and J.W. COSTERTON 436
- Ishiguro, E.E.**
Regulation of peptidoglycan biosynthesis in *relA*⁺ and *relA*⁻ strains of *Escherichia coli* during diauxic growth on glucose and lactose
EDWARD E. ISHIGURO 1206
- Iversen, J.O.**
Cache Valley virus: isolations from mosquitoes in Saskatchewan, 1972-1974
J.O. IVERSEN, R.J. WAGNER, M.K. LEUNG, L.B. HAYLES, and J.R. McLINTOCK 760
- Izard, D.**
Etude d'un groupe nouveau d'Enterobacteriaceae (groupe H₁) apparenté à l'espèce *Enterobacter cloacae*
D. IZARD, F. GAVINI, P.A. TRINEL et H. LECLERC 713
- Jackson, L.E.**
Fingerprinting bacterial chromosomal DNA with restriction endonuclease *EcoRI*: comparison of *Rhizobium* spp. and identification of mutants
JONATHAN R. MIELENZ, L.E. JACKSON, F. O'GARA, and K.T. SHANMUGAM 803
- Jarvis, G.A.**
CMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker counting method for the enumeration of *Escherichia coli* in raw meats
G.A. JARVIS, C.M. DAVIDSON, S. LONG, P. TONG, P. DODSWORTH, S. McLAUGHLIN, B.G. SHAW, H.J. BECKERS, S. QVIST, J. STAMMINGHAM, and B.J. STEWART 1321
- Jordan, D.C.**
Nutrition carbonée et étude taxonomique de *Bacillus subtilis* et *B. licheniformis*
M. DURAND, F. PICHINOTY, C. JOB et M. MANDEL 491
- Joncas, J.H.**
Persistence, reactivation, and cell transformation by human herpesviruses: herpes simplex 1,2 (HSV-1, HSV-2), cytomegalovirus (CMV), Varicella-zoster (VZV), Epstein-Barr virus (EBV)
JEAN H. JONCAS 254
- Jordan, D.C.**
A new nitrogen-fixing *Clostridium* species from a high Arctic ecosystem
D.C. JORDAN and PATRICIA J. McNICOL 947
- Jouve, H.**
Régulation de la synthèse de la catalase chez *Proteus mirabilis*
H. JOUVE, G. SAURET, A.M. LABOURÉ et J. PELMONT 302
- Jouve, H.**
Propriétés d'un mutant de *Proteus mirabilis* résistant au peroxyde d'hydrogène
G. SAURET, H. JOUVE et J. PELMONT 312
- Kamekura, M.**
A medium for commercial production of the halophilic *Micrococcus* nuclease
MASAHIRO KAMEKURA and HIROSHI ONISHI 1113
- Kasatiya, S.S.**
Un nouveau sérotype de *Salmonella* isolé au Canada: *Salmonella sherbrooke* (16:d:1,6)
F.M. GOSSELIN, A.K. BASU, T.M. CAPRIOLI et S.S. KASATIYA 1328
- Kates, M.**
Effect of glycerol on carotenogenesis in the extreme halophile, *Halobacterium cutirubrum*
S.C. KUSHWAHA and M. KATES 1288

- Kates, M.**
Studies of the biosynthesis of C₅₀ carotenoids in *Halobacterium cutirubrum*
S.C. KUSHWAHA and M. KATES 1292
- Kawai, H.**
Purification and some properties of uridine diphosphate *N*-acetylglucosamine pyrophosphorylase from *Neurospora crassa*
KENJI YAMAMOTO, MITSUAKI MORIGUCHI, HIROYASU KAWAI, and TATSUROKURO TOCHIKURA 1381
- Keller, K.H.**
A method for establishing stable concentration gradients in agar suitable for studying chemotaxis on a solid surface
LAWRENCE J. SHIMKETS, MARTIN DWORKIN, and KENNETH H. KELLER 1460
- Kelley, W.D.**
Mycelial lipids as an aid in identifying rust fungi in culture—*Cronartium fusiforme*
J.D. WEETE, W.D. KELLEY, and C.A. HOLLIS 1481
- Kemp, J.D.**
Isolation of a non-tumor-inducing mutant of the Ti plasmid of *Agrobacterium tumefaciens* strain B₆
BARBARA J. RAPP, JOHN D. KEMP, and FRANK WHITE 291
- Kenerley, C.M.**
The effects of a pesticide program on microbial populations from apple leaf litter
JOHN H. ANDREWS and CHARLES M. KENERLEY 1331
- Khan, A.W.**
Cellulose degradation by a new isolate from sewage sludge, a member of the Bacteroidaceae family
J.N. SADDLER and A.W. KHAN 1427
- Kidby, D.K.**
Trypsin-uncoupled synthesis and secretion of yeast invertase: implications for the mechanism of secretion
BRUCE E. HOLBEIN and DENIS K. KIDBY 528
- Kilbertus, G.**
Observation d'un sol forestier (rendzine) en microscopie électronique
G. KILBERTUS et J. PROTH 943
- Kinbacher, E.J.**
Nitrogen fixation associated with 'Park' Kentucky bluegrass (*Poa pratensis* L.)
R.C. SHEARMAN, W.L. PEDERSEN, R.V. KLUCAS, and E.J. KINBACHER 1197
- King, S.L.**
Phosphate uptake in chemostat cultures of *Escherichia coli* K-12 subjected to periodic β -glycerophosphate pulsing: a system for assaying alkaline phosphatase
J.C. FRANCIS and S.L. KING 560
- Kishimoto, R.A.**
Suppression of PHA-stimulated lymphocyte transformation in cynomolgus monkeys following infection with *Coxiella burnetii*
R.A. KISHIMOTO and J.C. GONDER 949
- Klucas, R.V.**
Nitrogen fixation associated with 'Park' Kentucky bluegrass (*Poa pratensis* L.)
R.C. SHEARMAN, W.L. PEDERSEN, R.V. KLUCAS, and E.J. KINBACHER 1197
- Kluepfel, D.**
Method for the rapid screening of cellulolytic streptomycetes and their mutants
N. DAIGNEAULT-SYLVESTRE and D. KLUPEFEL 858
- Knoop, F.C.**
In vitro attachment of *Treponema hyodysenteriae* to mammalian epithelial cells
FLOYD C. KNOOP, GORDON D. SCHRANK, and FRANK M. FERRARO 399
- Knowles, R.**
Effects of sulfide and acetylene on nitrous oxide reduction by soil and by *Pseudomonas aeruginosa*
TAT-YEE TAM and ROGER KNOWLES 1133
- Kogure, K.**
A tentative direct microscopic method for counting living marine bacteria
KAZUHIRO KOGURE, USHIO SIMIDU, and NOBUO TAGA 415
- Kolenbrander, P.E.**
Plasmid-determined 2-hydroxypyridine utilization by *Arthrobacter crystallopoietes*
M. WEINBERGER and P.E. KOLENBRANDER 329
- Konowalchuk, J.**
Response of various cell lines to *Escherichia coli* toxic products
J. KONOWALCHUK and J.I. SPEIRS 335
- Korhola, M.P.**
Partial characterization of a new C3-type capsule-dissolving phage of *Streptococcus cremoris*
MAJJA-LIISA SAXELIN, Eeva-Liisa NURMIAHO, M.P. KORHOLA, and VERONICA SUNDMAN 1182
- Kowshik, T.**
A modified method for testing inositol assimilation by *Cryptococcus* species
D.K. PALIWAL, H.S. RANDHAWA, and T. KOWSHIK 1188
- Krieg, N.R.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. I. Physiological aspects of enhanced aerotolerance
PAUL S. HOFFMAN, NOEL R. KRIEG, and ROBERT M. SMIBERT 1
- Krieg, N.R.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. II. Role of exogenous superoxide anions and hydrogen peroxide
PAUL S. HOFFMAN, HUGH A. GEORGE, NOEL R. KRIEG, and ROBERT M. SMIBERT 8
- Kropinski, A.M.**
The extraction and analysis of lipopolysaccharides from *Pseudomonas aeruginosa* strain PAO, and three rough mutants
ANDREW M. KROPINSKI, L.C. CHAN, and F.H. MILAZZO 390

- Krouse, H.R.**
The effect of pantothenate on sulfate metabolism and sulfur isotope fractionation by *Saccharomyces cerevisiae*
R.G.L. MCCREADY, G.A. DIN, and H.R. KROUSE 1139
- Krouse, H.R.**
Sulfur isotope fractionation by *Salmonella heidelberg*: inverse isotope effects during growth on high concentrations of Na_2SO_3
R.G.L. MCCREADY and H.R. KROUSE 1387
- Kuchma, S.R.**
The occurrence of *Candida albicans* in Lake Ontario bathing beaches
J.P. SHERRY, S.R. KUCHMA, and B.J. DUTKA 1036
- Kurata, H.**
The production of chaetoglobosins, sterigmatocystin, *O*-methylsterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. UDAGAWA, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHARA, S. NATORI, and M. UMEDA 170
- Kushwaha, S.C.**
Effect of glycerol on carotenogenesis in the extreme halophile, *Halobacterium cutirubrum*
S.C. KUSHWAHA and M. KATES 1288
- Kushwaha, S.C.**
Studies of the biosynthesis of C_{50} carotenoids in *Halobacterium cutirubrum*
S.C. KUSHWAHA and M. KATES 1292
- Labadie, J.**
Induction et repression de la synthèse de collagénase chez *Acinetobacter* sp.
JEAN-CLAUDE MONBOISSE, JEAN LABADIE et PHILIPPE GOUET 611
- Labouré, A.M.**
Régulation de la synthèse de la catalase chez *Proteus mirabilis*
H. JOUVE, G. SAURET, A.M. LABOURÉ et J. PELMONT 302
- Lafont, J.**
Modification transmissible induite *in vitro* chez *Mycobacterium tuberculosis* et *Mycobacterium bovis*
P. LAFONT et J. LAFONT 462
- Lafont, P.**
Modification transmissible induite *in vitro* chez *Mycobacterium tuberculosis* et *Mycobacterium bovis*
P. LAFONT et J. LAFONT 462
- Lagoda, A.**
The fate of aflatoxin in naturally contaminated corn during the ethanol fermentation
E.B. LILLEHOJ, A. LAGODA, and W.F. MAISCH 911
- Lagziel, A.**
Further studies of a new pathogenic mycobacterium (*M. haemophilum* sp. nov.)
D. SOMPOLINSKY, ANNIE LAGZIEL, and I. ROSENBERG 217
- Lallier, R.**
Influence de la longueur de la chaîne saccharidique des lipopolysaccharides bactériens sur la stimulation du système immunitaire
R. LALLIER, V.N. NIGAM et C.A. BRAILOVSKY 640
- Lam, J.**
Structural and biochemical examination of ghosts derived from a deep rough (heptose-deficient lipopolysaccharide) strain and a smooth strain of *Escherichia coli*
R.T. IRVIN, J. LAM, and J.W. COSTERTON 436
- Lambert, N.G.**
Moyen de prédire le pourcentage de dégradation de la fluorescence induite par impulsions de lumière laserienne dans la technique d'immunofluorescence FTA-ABS
N.G. LAMBERT et A.R. STE-MARIE 1479
- Lancy, P., Jr.**
Effects of some platinum IV complexes on cell division of *Escherichia coli*
C.A. FERGUSON, R.G.E. MURRAY, and P. LANCY, JR. 545
- Lapp, M.S.**
Fatty acid composition of *Rhizobium* spp.
S.L. MACKENZIE, M.S. LAPP, and J.J. CHILD 68
- Larose, Y.**
Polioviruses as indicator of virological quality of water
PIERRE PAYMENT, YOLANDE LAROSE, and MICHEL TRUDEL 1212
- Larose, Y.**
Polioviruses and other enteroviruses in urban sewage from Laval (Canada): presence of wild strains of poliovirus
P. PAYMENT, Y. LAROSE, and M. TRUDEL 1305
- Larson, R.L.**
Nitrogen-metabolizing enzymes of *Diplodia maydis*, a *Zea mays* L. stalk rot causing fungus
JAMES B. BUSSARD and RUSSELL L. LARSON 167
- LaRue, T.A.**
Bacterial utilization of a hydrazine derivative as nitrogen source for growth
T.A. LARUE and J.J. CHILD 822
- Laszlo, A.**
Differentiation of rapidly growing mycobacteria with Trimethoprim (Tnp)
A. LASZLO and L. EIDUS 991
- Lavergne, G.**
Induction of reaginic (IgE) gonococcal antibodies in the rat by a common antigen of *Neisseria gonorrhoeae*
F.E. ASHTON, H.M. VIJAY, G. LAVERGNE, B. BRODEUR, and B.B. DIENA 138
- Lawson, J.W.**
Cyclic adenosine 3',5'-monophosphate in *Neisseria gonorrhoeae*
DOROTHY M. MORRIS and JOHN W. LAWSON 235
- Leal, J.A.**
Studies of the spore walls of *Agaricus bisporus* and *Agaricus campestris*
C.GARCIA MENDOZA, J.A. LEAL, and M. NOVAES-LEDIEU 32
- Leary, J.V.**
Transfer and integration of chromosomal genes from *Pseudomonas glycinea* into *Pseudomonas aeruginosa*
JOHN V. LEARY 637

- Leben, C.**
Adherence of bacteria to leaves
CURT LEBEN and ROBERT E. WHITMOYER 896
- Leclerc, H.**
Etude d'un groupe nouveau d'Enterobacteriaceae (groupe H₁)
apparenté à l'espèce *Enterobacter cloacae*
D. IZARD, F. GAVINI, P.A. TRINEL et H. LECLERC 713
- Leduc, L.G.**
Quantitative ecology of psychrophilic bacteria in an aquatic
environment and characterization of heterotrophic bacteria from
permanently cold sediments
L.G. LEDUC and G.D. FERRONI 1433
- Leduy, A.**
Utilization of seawater-urea as a culture medium for *Spirulina*
maxima
ONIL FAUCHER, BERNARD COUPAL, and ANH LEDUY 752
- Lee, I.-M.**
Spiroplasmas: serological grouping of strains associated with
plants and insects
R.E. DAVIS, I.-M. LEE, and L.K. BASCIANO 861
- Lee, R.P.W.**
Outgrowth and sporulation studies on *Clostridium botulinum* type
E: influence of isoleucine
R.Z. HAWIRKO, C.A. NACCARATO, R.P.W. LEE, and
P.Y. MAEBA 522
- Lee, S.Y.**
A modified tube method for the cultivation and enumeration of
anaerobic bacteria
JAMES E. OGG, SUN Y. LEE, and BETTY J. OGG 987
- Le Graet, Y.**
Addendum: Survie de *Staphylococcus aureus* au cours de la
préparation et de la conservation de lait écrémé en poudre.
Problèmes posés par le dénombrement des survivants
A. CHOPIN, SILVIA TESONE, J.-P. VILA, Y. LE GRAET et
G. MOCQUOT 237
- Lesley, S.M.**
Thymidine incorporation into *Rhizobium meliloti*
R.M. BEHKI and S.M. LESLEY 675
- Letarte, R.**
Investigation of antibodies against *Fasciola hepatica* in moose
Alces americana
YVES BRINDLE, ROBERT LETARTE, and
JOCELYNE GAGNON 788
- Leung, M.K.**
Cache Valley virus: isolations from mosquitoes in Saskatchewan,
1972-1974
J.O. IVERSEN, R.J. WAGNER, M.K. LEUNG, L.B. HAYLES, and
J.R. MCCLINTOCK 760
- Leveau, M.**
Etude de l'évolution des populations bactériennes d'origine tellu-
rique, enterique et marine dans des systèmes planctoniques sou-
mis à une pollution urbaine, traitement mathématique des
données
R. AREF, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN,
G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC,
A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA,
D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et
D. SAUTRIOT 1073
- Levesque, G.**
A simple device for uniform inoculation of nutrient surfaces
J. GOULET, G. LEVESQUE, and J.R. MOREAU 1111
- Lévesque, R.**
Increase in the in vitro susceptibility of *Staphylococcus aureus* to
antimicrobial agents in the presence of *Candida albicans*
J. DEREPENTIGNY, R. LÉVESQUE, and L.G. MATHIEU 429
- Lewis, J.A.**
Influence of soil texture on survival and saprophytic activity of
Rhizoctonia solani in soils
J.A. LEWIS 1310
- Liao, C.H.**
Polymyxin resistance in *Agrobacterium tumefaciens* and its effect
on crown gall tumor induction
C.H. LIAO and G.T. HEBERLEIN 185
- Lillehoj, E.B.**
The fate of aflatoxin in naturally contaminated corn during the
ethanol fermentation
E.B. LILLEHOJ, A. LAGODA, and W.F. MAISCH 911
- Lim, D.V.**
Evaluation of an improved rapid coagglutination method for the
serological grouping of beta-hemolytic streptococci
DANIEL V. LIM, ROSELLA D. SMITH, and SUSAN DAY 40
- Lingg, A.J.**
Dissolved organic matter utilization and oxygen uptake in algal-
bacterial microcosms
DAVID L. TISON and A.J. LINGG 1315
- Lippi, D.**
Effect of oxygen on batch and continuous cultures of a nitrogen-
fixing *Arthrobacter* sp.
ISABELLA CACCIARI, DANIELA LIPPI, and
LUCIEN M. BORDELEAU 746
- Liu, K.-C.**
Minute tubular forms in soil
L.E. CASIDA, JR., and KANG-CHIEN LIU 722
- Liu, S.-Y.**
Characterization of an enzyme from *Rhizoctonia praticola* which
polymerizes phenolic compounds
JEAN-MARC BOLLAG, ROY D. SJOBLAD, and SHU-
YEN LIU 229

Lizarraga-Partida, M.L.

Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données

R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073

Lo, C.Y.

Immunologic evidence that staphylococcal alpha toxin is oriented on membranes

C.Y. LO and H.B. FACKRELL 686

Loewen, R.R.

Mixed bacteriophage infection of *Escherichia coli*: exclusion of superinfecting T4 by T7

R.R. LOEWEN, R.C. MILLER, JR., and R.A.J. WARREN 867

Loh, L.

Model systems for analysis of latent cytomegalovirus infections

J.B. HUDSON, J.K. CHANTLER, L. LOH, V. MISRA, and M.T. MULLER 245

Lombard, Y.

Origine et formation de différents types de vacuoles induites par la multiplication d'Alphavirus Sindbis dans divers systèmes cellulaires

YVES LOMBARD, PHILIPPE POINDRON et AIMÉ PORTE 1452

Long, S.

ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype 1 in raw meats

M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321

López, R.

Optimization on the selection of auxotrophic mutants in *Candida utilis* by snail enzyme treatment

J.M. DELGADO, L.S. HERRERA, C. PÉREZ, and R. LÓPEZ 486

Maca, H.W.

Evidence for a periplasmic location in *Comamonas terrigena* of the inducible tyrosine sulfate sulfohydrolase

H. WILLIAM MACA and JOHN W. FITZGERALD 275

MacInnes, J.I.

Deoxyribonucleic acid relationships among members of the genus *Aeromonas*

JAN I. MACINNES, TREVOR J. TRUST, and JORGE H. CROSA 579

MacInnes, J.I.

Erratum: Deoxyribonucleic acid relationships among members of the genus *Aeromonas*

JAN I. MACINNES, TREVOR J. TRUST, and JORGE H. CROSA 1489

MacKenzie, S.L.

Fatty acid composition of *Rhizobium* spp.

S.L. MACKENZIE, M.S. LAPP, and J.J. CHILD 68

MacRae, T.H.

The function of fimbriae in *Myxococcus xanthus*. II. The role of fimbriae in cell-cell interactions

W.J. DOBSON, H.D. MCCURDY, and T.H. MACRAE 1359

Maeba, P.Y.

Outgrowth and sporulation studies on *Clostridium botulinum* type E: influence of isoleucine

R.Z. HAWIRKO, C.A. NACCARATO, R.P.W. LEE, and P.Y. MAEBA 522

Magnan, J.

A dominant temperature-sensitive assembly mutant of adenovirus type 2

ERIC B. CARSTENS, JOHANNE MAGNAN, and JOSEPH WEBER 646

Maisch, W.F.

The fate of aflatoxin in naturally contaminated corn during the ethanol fermentation

E.B. LILLEHOJ, A. LAGODA, and W.F. MAISCH 911

Majtán, V.

Effect of glycerol on viability and other properties of starved *Mycobacterium fortuitum*

V. MAJTÁN and L. DROBNICA 600

Mandel, M.

Nutrition carbonée et étude taxonomique de *Bacillus subtilis* et *B. licheniformis*

M. DURAND, F. PICHINOTY, C. JOB et M. MANDEL 491

Manhart, J.R.

Nitrate reductase activities of rhizobia and the correlation between nitrate reduction and nitrogen fixation

JAMES R. MANHART and PETER P. WONG 1169

Martin, W.G.

Properties of malate dehydrogenase isolated from *Methanospirillum hungatii*

G.D. SPROTT, R.C. MCKELLAR, K.M. SHAW, J.G. GIROUX, and W.G. MARTIN 192

Martinez-Molina, E.

Antibiotic production by *Pseudomonas reptilivora* as a phage conversion

E. MARTINEZ-MOLINA and J. OLIVARES 1108

Marty, D.

Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données

R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073

Mathieu, L.G.

Increase in the in vitro susceptibility of *Staphylococcus aureus* to antimicrobial agents in the presence of *Candida albicans*

J. DEREPENTIGNY, R. LÉVESQUE, and L.G. MATHIEU 429

Maurer, D.

Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données

R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073

Mayo, J.A.

DNA base composition, nature of intracellular DNA, morphology, and classification of bacteriophages infecting *Micrococcus luteus*

SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH, H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and J.V. SCALETTI 1027

Mayrand, D.

Identification of clinical isolates of selected species of *Bacteroides*: production of phenylacetic acid

D. MAYRAND 927

McBride, B.C.

The transformation of arsenicals by *Candida humicola*
WILLIAM R. CULLEN, BARRY C. MCBRIDE, and
A. WENDY PICKETT 1201

McCready, R.G.L.

The effect of pantothenate on sulfate metabolism and sulfur isotope fractionation by *Saccharomyces cerevisiae*
R.G.L. MCCREADY, G.A. DIN, and H.R. KROUSE 1139

McCready, R.G.L.

Sulfur isotope fractionation by *Salmonella heidelberg*: inverse isotope effects during growth on high concentrations of Na_2SO_3
R.G.L. MCCREADY and H.R. KROUSE 1387

McCurdy, H.D.

The function of fimbriae in *Myxococcus xanthus*. I. Purification and properties of *M. xanthus* fimbriae
W.J. DOBSON and H.D. MCCURDY 1152

McCurdy, H.D.

Demonstration of positive chemotaxis to cyclic GMP and 5'-AMP in *Myxococcus xanthus* by means of a simple apparatus for generating practically stable concentration gradients
J. HO and H.D. MCCURDY 1214

McCurdy, H.D.

The function of fimbriae in *Myxococcus xanthus*. II. The role of fimbriae in cell-cell interactions
W.J. DOBSON, H.D. MCCURDY, and T.H. MACRAE 1359

McKellar, R.C.

Properties of malate dehydrogenase isolated from *Methanospirillum hungatii*
G.D. SPROTT, R.C. MCKELLAR, K.M. SHAW, J.G. GIROUX, and W.G. MARTIN 192

McKellar, R.C.

Spheroplasts of *Methanospirillum hungatii* formed upon treatment with dithiothreitol
G.D. SPROTT, J.R. COLVIN, and R.C. MCKELLAR 730

McLaughlin, S.

ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype 1 in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321

McLintock, J.R.

Cache Valley virus: isolations from mosquitoes in Saskatchewan, 1972-1974
J.O. IVERSEN, R.J. WAGNER, M.K. LEUNG, L.B. HAYLES, and J.R. McLINTOCK 760

McMahon, K.J.

An agar-gel immunodiffusion test for detection of *Brucella* antibodies in human serum
K.J. McMAHON, E.D. RENNER, G.W. ALLMARAS, and D.K. ANDERSON 850

McNicol, P.J.

A new nitrogen-fixing *Clostridium* species from a high Arctic ecosystem
D.C. JORDAN and PATRICIA J. McNICOL 947

Mehta, R.J.

Relationship between carbon source and susceptibility of *Cephalosporium acremonium* to selected amino acid analogues
R.J. MEHTA and C.H. NASH 818

Meyer, M.

A broth-disc technique for the assay of antibiotic synergism
MARGARET MEYER and LOUISE HOFHERR 1232

Michel, G.

Identification d'une nucléotide pyrophosphatase exocellulaire dans le milieu de culture de *Streptomyces mediterranei* ME/R 17
GÉRARD PELLON et GEORGES MICHEL 53

Middlebrook, J.L.

Protection of mammalian cells from diphtheria toxin by exogenous nucleotides
JOHN L. MIDDLEBROOK and REBECCA B. DORLAND 285

Mielenz, J.R.

Fingerprinting bacterial chromosomal DNA with restriction endonuclease *EcoRI*: comparison of *Rhizobium* spp. and identification of mutants
JONATHAN R. MIELENZ, L.E. JACKSON, F. O'GARA, and K.T. SHANMUGAM 803

Milam, J.R.

Isolation of *Azospirillum* from diverse geographic regions
M.E. TYLER, J.R. MILAM, R.L. SMITH, S.C. SCHANK, and D.A. ZUBERER 693

Milazzo, F.H.

The extraction and analysis of lipopolysaccharides from *Pseudomonas aeruginosa* strain PAO, and three rough mutants
ANDREW M. KROPINSKI, L.C. CHAN, and F.H. MILAZZO 390

Miller, J.J.

Erratum: Sporulation in single-spore isolates from amitrole-induced multisporous asci of *Saccharomyces cerevisiae*
M. ASHRAF and J.J. MILLER 650

- Miller, R.C., Jr.**
Mixed bacteriophage infection of *Escherichia coli*: exclusion of superinfecting T4 by T7
R.R. LOEWEN, R.C. MILLER, JR., and R.A.J. WARREN 867
- Miller, S.E.**
Age-related physiological studies comparing *Candida albicans* chlamydospores to yeasts
SARA E. MILLER and W.R. FINNERTY 765
- Misra, V.**
Model systems for analysis of latent cytomegalovirus infections
J.B. HUDSON, J.K. CHANTLER, L. LOH, V. MISRA, and M.T. MULLER 245
- Mitchell, R.**
Chemotactic responses of *Vibrio alginolyticus* to algal extracellular products
ROY D. SJOBLAD and RALPH MITCHELL 964
- Moazamie, N.**
Characterization of two *Salmonella newport* bacteriophages
N. MOAZAMIE, H.-W. ACKERMANN, and M.R.V. MURTHY 1063
- Mocquot, G.**
Addendum: Survie de *Staphylococcus aureus* au cours de la préparation et de la conservation de lait écrémé en poudre. Problèmes posés par le dénombrement des survivants
A. CHOPIN, SILVIA TESONE, J.-P. VILA, Y. LE GRAET et G. MOCQUOT 237
- Monboisse, J.-C.**
Induction et repression de la synthèse de collagénase chez *Acinetobacter* sp.
JEAN-CLAUDE MONBOISSE, JEAN LABADIE et PHILIPPE GOUET 611
- Monette, M.T.**
Measurement of antibodies to rabies virus by immunoelectron microscopy
R.K. CHAUDHARY, H.C. CHO, and M.T. MONETTE 1209
- Montie, D.B.**
Methionine transport in *Pseudomonas aeruginosa*
THOMAS C. MONTIE and DIANE B. MONTIE 1103
- Montie, T.C.**
Methionine transport in *Pseudomonas aeruginosa*
THOMAS C. MONTIE and DIANE B. MONTIE 1103
- Montplaisir, S.**
Latency and activation of cytomegalovirus in man and in mice
S. MONTPLAISIR 261
- Moore, R.L.**
Biological effects of magnetic fields: studies with microorganisms
RICHARD L. MOORE 1145
- Moo-Young, M.**
Bioconversion of wheat straw and wheat straw components into single-cell protein
D. S. CHAHAL, M. MOO-YOUNG, and G.S. DHILLON 793
- Moreau, J.R.**
A simple device for uniform inoculation of nutrient surfaces
J. GOULET, G. LEVESQUE, and J.R. MOREAU 1111
- Moriguchi, M.**
Purification and some properties of uridine diphosphate *N*-acetylglucosamine pyrophosphorylase from *Neurospora crassa*
KENJI YAMAMOTO, MITSUAKI MORIGUCHI, HIROYASU KAWAI, and TATSUROKURO TOCHIKURA 1381
- Morriss, D.M.**
Cyclic adenosine 3',5'-monophosphate in *Neisseria gonorrhoeae*
DOROTHY M. MORRIS and JOHN W. LAWSON 235
- Muller, M.T.**
Model systems for analysis of latent cytomegalovirus infections
J.B. HUDSON, J.K. CHANTLER, L. LOH, V. MISRA, and M.T. MULLER 245
- Muroi, T.**
The production of chaetoglobosins, sterigmatocystin, *O*-methylsterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. UDAGAWA, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHARA, S. NATORI, and M. UMEDA 170
- Murray, R.G.E.**
Effects of some platinum IV complexes on cell division of *Escherichia coli*
C.A. FERGUSON, R.G.E. MURRAY, and P. LANCY, JR. 545
- Murthy, M.R.V.**
Characterization of two *Salmonella newport* bacteriophages
N. MOAZAMIE, H.-W. ACKERMANN, and M.R.V. MURTHY 1063
- Myers, P.**
Comparative studies of the mosquito-larval toxin of *Bacillus sphaericus* SSII-1 and 1593
PAULA MYERS, ALLAN A. YOSTEN, and ELIZABETH W. DAVIDSON 1227
- Naccarato, C.A.**
Outgrowth and sporulation studies on *Clostridium botulinum* type E: influence of isoleucine
R.Z. HAWIRKO, C.A. NACCARATO, R.P.W. LEE, and P.Y. MAEBA 522
- Nash, C.H.**
Relationship between carbon source and susceptibility of *Cephalosporium acremonium* to selected amino acid analogues
R.J. MEHTA and C.H. NASH 818
- Natori, S.**
The production of chaetoglobosins, sterigmatocystin, *O*-methylsterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. UDAGAWA, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHARA, S. NATORI, and M. UMEDA 170
- Nigam, V.N.**
Influence de la longueur de la chaîne saccharidique des lipopolysaccharides bactériens sur la stimulation du système immunitaire
R. LALLIER, V.N. NIGAM et C.A. BRAILOVSKY 640

Nottingham, P.M.

ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART

1321

Novaes-Ledieu, M.

Studies of the spore walls of *Agaricus bisporus* and *Agaricus campestris*
C.GARCIA MENDOZA, J.A. LEAL, and M. NOVAES-LEDIEU

32

Nurmiaho, E.-L.

Partial characterization of a new C3-type capsule-dissolving phage of *Streptococcus cremoris*
MAJJA-LIISA SAXELIN, Eeva-LIISA NURMIAHO, M.P. KORHOLA, and VERONICA SUNDMAN

1182

Oblack, D.L.

Enhancement of tissue damage by *Candida albicans* in cortisone or nitrogen mustard-treated mice
DONNA L. OBLACK, JAN SCHWARZ, and IAN ALAN HOLDER

1075

O'Day, D.H.

Evidence for chemotaxis during sexual development in *Dictyostelium discoideum*
DANTON H. O'DAY and ANTONY J. DURSTON

542

O'Day, D.H.

Aggregation during sexual development in *Dictyostelium discoideum*
DANTON H. O'DAY

1416

O'Gara, F.

Fingerprinting bacterial chromosomal DNA with restriction endonuclease *EcoRI*: comparison of *Rhizobium* spp. and identification of mutants
JONATHAN R. MIELENZ, L.E. JACKSON, F. O'GARA, and K.T. SHANMUGAM

803

Ogg, B.J.

A modified tube method for the cultivation and enumeration of anaerobic bacteria
JAMES E. OGG, SUN Y. LEE, and BETTY J. OGG

987

Ogg, J.E.

A modified tube method for the cultivation and enumeration of anaerobic bacteria
JAMES E. OGG, SUN Y. LEE, and BETTY J. OGG

987

Olivares, J.

Antibiotic production by *Pseudomonas reptilivora* as a phage conversion
E. MARTINEZ-MOLINA and J. OLIVARES

1108

Olson, W.C., Jr.

Transduction of penicillinase production in *Staphylococcus epidermidis* and nature of the genetic determinant
W.C. OLSON, JR., J.T. PARISI, P.A. TOTTEN, and J.N. BALDWIN

508

Onishi, H.

A medium for commercial production of the halophilic *Micrococcus* nuclease
MASAHIRO KAMEKURA and HIROSHI ONISHI

1113

Otokunefor, T.V.

Immunological properties of partially purified material with monocytosis-producing activity from *Listeria monocytogenes*
T.V. OTOKUNEFOR, D.T. SHUM, and S.B. GALSWORTHY

706

Paliwal, D.K.

A modified method for testing inositol assimilation by *Cryptococcus* species
D.K. PALIWAL, H.S. RANDHAWA, and T. KOWSHIK

1188

Paranchych, W.

Biochemical studies on pili isolated from *Pseudomonas aeruginosa* strain PAO
W. PARANCHYCH, P.A. SASTRY, L.S. FROST, M. CARPENTER, G.D. ARMSTRONG, and T.H. WATTS

1175

Parisi, J.T.

Transduction of penicillinase production in *Staphylococcus epidermidis* and nature of the genetic determinant
W.C. OLSON, JR., J.T. PARISI, P.A. TOTTEN, and J.N. BALDWIN

508

Park, C.E.

Effect of non-fat dry milk on recovery of staphylococcal thermoluciferase from foods
C.E. PARK, H.B. EL DERE, and M.K. RAYMAN

44

Park, C.E.

Inhibitory effect of cocoa powder on the growth of a variety of bacteria in different media
C.E. PARK, Z.K. STANKIEWICZ, M.K. RAYMAN, and A.H.W. HAUSCHILD

233

Park, C.E.

A modified pork plasma agar for the enumeration of *Staphylococcus aureus* in foods
A.H.W. HAUSCHILD, C.E. PARK, and R. HILSHEIMER

1052

Patriti, G.

Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT

1073

Paul, J.H.

Asparagine metabolism and asparaginase activity in a euryhaline *Chlamydomonas* species
JOHN H. PAUL and KEITH E. COOKSEY

1443

Payment, P.

Polioviruses as indicator of virological quality of water
PIERRE PAYMENT, YOLANDE LAROSE, and MICHEL TRUDEL

1212

Payment, P.

Polioviruses and other enteroviruses in urban sewage from Laval (Canada): presence of wild strains of poliovirus
P. PAYMENT, Y. LAROSE, and M. TRUDEL

1305

- Pedersen, W.L.**
Nitrogen fixation associated with 'Park' Kentucky bluegrass (*Poa pratensis* L.)
R.C. SHEARMAN, W.L. PEDERSEN, R.V. KLUCAS, and E.J. KINBACHER 1197
- Pellon, G.**
Identification d'une nucleotide pyrophosphatase exocellulaire dans le milieu de culture de *Streptomyces mediterranei* ME/R 17
GÉRARD PELLON et GEORGES MICHEL 53
- Pelmont, J.**
Régulation de la synthèse de la catalase chez *Proteus mirabilis*
H. JOUVE, G. SAURET, A.M. LABOURÉ et J. PELMONT 302
- Pelmont, J.**
Propriétés d'un mutant de *Proteus mirabilis* résistant au peroxyde d'hydrogène
G. SAURET, H. JOUVE et J. PELMONT 312
- Pérez, C.**
Optimization on the selection of auxotrophic mutants in *Candida utilis* by snail enzyme treatment
J.M. DELGADO, L.S. HERRERA, C. PÉREZ, and R. LÓPEZ 486
- Petro, R.**
Use of antisera against bovine (NCDV) and simian (SA11) rotaviruses in ELISA to detect different types of human rotavirus
F.R. BISHAE, L. SPENCE, D. GOODWIN, and R. PETRO 1118
- Phelan, M.B.**
Isolation of lignocellulose-decomposing actinomycetes and degradation of specifically ¹⁴C-labeled lignocelluloses by six selected *Streptomyces* strains
MARY BETH PHELAN, DON L. CRAWFORD, and ANTHONY L. POMETTO III 1270
- Pichinoty, F.**
Nutrition carbonée et étude taxonomique de *Bacillus subtilis* et *B. licheniformis*
M. DURAND, F. PICHINOTY, C. JOB et M. MANDEL 491
- Pickett, A.W.**
The transformation of arsenicals by *Candida humicola*
WILLIAM R. CULLEN, BARRY C. MCBRIDE, and A. WENDY PICKETT 1201
- Pointron, P.**
Origine et formation de différents types de vacuoles induites par la multiplication d'Alphavirus Sindbis dans divers systèmes cellulaires
YVES LOMBARD, PHILIPPE POINDRON et AIMÉ PORTE 1452
- Polak-Vogelzang, A.A.**
Scanning electron microscopy of *Acholeplasma* colonies on agar
ANNA A. POLAK-VOGELZANG, ROBERT A. SAMSON, and GERARD T.N. DE LEEUW 1373
- Pometto, A.L. III**
Isolation of lignocellulose-decomposing actinomycetes and degradation of specifically ¹⁴C-labeled lignocelluloses by six selected *Streptomyces* strains
MARY BETH PHELAN, DON L. CRAWFORD, and ANTHONY L. POMETTO III 1270
- Porte, A.**
Origine et formation de différents types de vacuoles induites par la multiplication d'Alphavirus Sindbis dans divers systèmes cellulaires
YVES LOMBARD, PHILIPPE POINDRON et AIMÉ PORTE 1452
- Proth, J.**
Observation d'un sol forestier (rendzine) en microscopie électronique
G. KILBERTUS et J. PROTH 943
- Quan, A.L.**
Evaluation of bactericidal assay in serotyping *Neisseria meningitidis* group A
ALICE L. QUAN and JOHN E. SIPPEL 929
- Qvist, S.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Rake, J.B.**
The effect of phenazine methosulfate-ascorbate on bacterial active transport and adenosine triphosphate formation: inhibition of *Pseudomonas aeruginosa* and stimulation of *Escherichia coli*
R.G. EAGON, T.W. HODGE, III, J.B. RAKE, and J.M. YARBROUGH 798
- Ramia, S.**
Second-step concentration of viruses in drinking and surface waters using polyethylene glycol hydroextraction
SAMI RAMIA and SYED A. SATTAR 587
- Randhawa, H.S.**
A modified method for testing inositol assimilation by *Cryptococcus* species
D.K. PALIWAL, H.S. RANDHAWA, and T. KOWSHIK 1188
- Rapp, B.J.**
Isolation of a non-tumor-inducing mutant of the Ti plasmid of *Agrobacterium tumefaciens* strain B₆
BARBARA J. RAPP, JOHN D. KEMP, and FRANK WHITE 291
- Rawn, C.D.**
Polyadenylate-containing RNA in dormant and germinating *Botryodiplodia theobromae* pycnidiospores
JAMES L. VAN ETEN and CARROLL D. RAWN 375
- Rayman, M.K.**
Effect of non-fat dry milk on recovery of staphylococcal thermoluciferase from foods
C.E. PARK, H.B. EL DERE, and M.K. RAYMAN 44
- Rayman, M.K.**
Inhibitory effect of cocoa powder on the growth of a variety of bacteria in different media
C.E. PARK, Z.K. STANKIEWICZ, M.K. RAYMAN, and A.H.W. HAUSCHILD 233

- Rayman, M.K.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Reczek, E.B.**
Effects of oxygen tension on the lipid composition of *Azotobacter chroococcum*
EDWARD B. RECZEK and D.N. BURTON 1239
- Reed, J.P.**
Temperature-sensitive mutants of bacteriophage SH-133 specific for the hydrogen bacterium *Pseudomonas facilis*: isolation, complementation, and partial characterization
CHRISTINE M. BATTREALL, WILLIAM E. FRIEDRICH, JEFFREY P. REED, and GARY M. ARON 86
- Reifschneider, F.J.B.**
A liquid medium for the production of *Kabatiella zeae* conidia
FRANCISCO J.B. REIFSCHNEIDER and DEANE C. ARNY 1100
- Renner, E.D.**
An agar-gel immunodiffusion test for detection of *Brucella* antibodies in human serum
K.J. McMAHON, E.D. RENNER, G.W. ALLMARAS, and D.K. ANDERSON 850
- Rettenmier, C.W.**
The role of temperature bacteriophage SP β in phage-mediated interference in *Bacillus subtilis*
CARL W. RETTENMIER, BARRY GINGELL, and H. ERNEST HEMPHILL 1345
- Reyes, A.A.**
Populations of the spinach wilt pathogen, *Fusarium oxysporum* f. sp. *spinaciae*, in the root tissues, rhizosphere, and soil in the field
ANDRES A. REYES 227
- Reys, J.P.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Rinder, D.F.**
Thiocyanate utilization by an *Arthrobacter*
P.M. BETTS, D.F. RINDER, and J.R. FLEEKER 1277
- Roach, S.**
Indigenous bacteria influence the number of *Salmonella typhimurium* in the ileum of gnotobiotic mice
SALLY ROADH and GERALD W. TANNOCK 1352
- Roberts, D.L.**
Superiority of a soil debris isolatin method over a beet seed colonization method for assay of *Rhizoctonia solani* at high soil inoculum densities
D.L. ROBERTS and L.J. HERR 110
- Roberts, D.L.**
Soil populations of *Rhizoctonia solani* from areas of healthy and diseased beets within four sugarbeet fields differing in soil texture
D.L. ROBERTS and L.J. HERR 902
- Romano, J.C.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine, traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Rose, A.H.**
Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 888
- Rose, A.H.**
Erratum: Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 1489
- Rosenberg, I.**
Further studies of a new pathogenic mycobacterium (*M. haemophilum* sp. nov.)
D. SOMPOLINSKY, ANNIE LAGZIEL, and I. ROSENBERG 217
- Rosenthal, L.J.**
Replication of herpesviruses and latency
LEONARD J. ROSENTHAL 239
- Roth, D.A.**
Low temperature induces decreased germinability of *Cylindrocleftidium microsclerotia*
DON A. ROTH, GARY J. GRIFFIN, and PHILIP J. GRAHAM 157
- Rouse, B.T.**
Immune control of herpesvirus latency
L.A. BABIUK and B.T. ROUSE 267
- Russell, P.**
A new gene involved in expression of fructose-1,6-diphosphate aldolase activity in *Escherichia coli*
ALAN G. ATHERLY and PAUL RUSSELL 937
- Ryan, A.**
Evaluation of the antiserum agar method for the serogroup identification of *Neisseria meningitidis*
F.E. ASHTON, A. RYAN, B.B. DIENA, and C.E. FRASCH 784
- Ryan, R.W.**
Release of rhodanese from *Pseudomonas aeruginosa* by cold shock and its localization within the cell
R.W. RYAN, M.P. GOURLIE, and R.C. TILTON 340
- Sacks, L.E.**
High yields of coatless spores of *Clostridium perfringens* strain 8-6 in a defined medium
L.E. SACKS and R.S. THOMAS 642

- Sadana, J.C.**
Enzymatic hydrolysis of cellulosic materials by *Sclerotium rolfsii* culture filtrate for sugar production
J.G. SHEWALE and J.C. SADANA 773
- Saddler, J.N.**
Degradation of bacterial lipopolysaccharide by the slime mould *Physarium polycephalum*
JOHN N. SADDLER, JOHN G. COOTE, and ALASTAIR C. WARDLAW 124
- Saddler, J.N.**
Cellulose degradation by a new isolate from sewage sludge, a member of the Bacteroidaceae family
J.N. SADDLER and A.W. KHAN 1427
- Sadoff, H.L.**
Physiological studies of a temperature-sensitive sporulation mutant of *Bacillus cereus* T
G.N. STELMA, JR., and H.L. SADOFF 628
- Ste-Marie, A.R.**
Moyen de prédire le pourcentage de dégradation de la fluorescence induite par impulsions de lumière laserienne dans la technique d'immunofluorescence FTA-ABS
N.G. LAMBERT et A.R. STE-MARIE 1479
- Salkin, I.F.**
Further simplification of the *Guizotia abyssinica* seed medium for identification of *Cryptococcus neoformans* and *Cryptococcus bacillispora*
IRA F. SALKIN 1116
- Samson, R.A.**
Scanning electron microscopy of *Acholeplasma* colonies on agar
ANNA A. POLAK-VOGELZANG, ROBERT A. SAMSON, and GERARD T.N. DE LEEUW 1373
- Sanchez, J.**
Induction of β -galactosidase in *Streptomyces violaceus*
JESUS SANCHEZ and CARLOS HARDISSON 833
- Sanderson, K.E.**
The influence of cations on the permeability of the outer membrane of *Salmonella typhimurium* and other gram-negative bacteria
H. STAN-LOTTER, M. GUPTA, and K.E. SANDERSON 475
- Sastry, P.A.**
Biochemical studies on pili isolated from *Pseudomonas aeruginosa* strain PAO
W. PARANCHYCH, P.A. SASTRY, L.S. FROST, M. CARPENTER, G.D. ARMSTRONG, and T.H. WATTS 1175
- Sattar, S.A.**
Second-step concentration of viruses in drinking and surface waters using polyethylene glycol hydroextraction
SAMI RAMIA and SYED A. SATTAR 587
- Sauret, G.**
Régulation de la synthèse de la catalase chez *Proteus mirabilis*
H. JOUVE, G. SAURET, A.M. LABOURÉ et J. PELMONT 302
- Sauret, G.**
Propriétés d'un mutant de *Proteus mirabilis* résistant au peroxyde d'hydrogène
G. SAURET, H. JOUVE et J. PELMONT 312
- Sautriot, D.**
Etude de l'évolution des populations bactériennes d'origine tellurique, enterique et marine dans des systèmes planctoniques soumis à une pollution urbaine. traitement mathématique des données
R. ARFI, A. BIANCHI, M. BIANCHI, F. BLANC, M.C. BONIN, G. CHAMPALBERT, F. CUBIZOLLES, P. DAVID, J.P. DURBEC, A. FRANCOIS, M. LEVEAU, M.L. LIZARRAGA-PARTIDA, D. MARTY, D. MAURER, G. PATRITI, J.P. REYS, J.C. ROMANO et D. SAUTRIOT 1073
- Saxelin, M.-L.**
Partial characterization of a new C3-type capsule-dissolving phage of *Streptococcus cremoris*
MAIJA-LIISA SAXELIN, Eeva-Liisa NURMIAHO, M.P. KORHOLA, and VERONICA SUNDMAN 1182
- Scaletti, J.V.**
DNA base composition, nature of intracellular DNA, morphology, and classification of bacteriophages infecting *Micrococcus luteus*
SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH, H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and J.V. SCALETTI 1027
- Schank, S.C.**
Isolation of *Azospirillum* from diverse geographic regions
M.E. TYLER, J.R. MILAM, R.L. SMITH, S.C. SCHANK, and D.A. ZUBERER 693
- Schiemann, D.A.**
Synthesis of a selective agar medium for *Yersinia enterocolitica*
D.A. SCHIEMANN 1298
- Schneider, E.F.**
Ultrastructural studies on the cell walls in *Fusarium sulphureum*
EDWARD F. SCHNEIDER and ALAN B. WARDROP 75
- Schneider, E.F.**
Effect of thiols on macroconidia of *Fusarium sulphureum*
LESLIE R. BARRAN and EDWARD F. SCHNEIDER 618
- Schrank, G.D.**
In vitro attachment of *Treponema hyodysenteriae* to mammalian epithelial cells
FLOYD C. KNOOP, GORDON D. SCHRANK, and FRANK M. FERRARO 399
- Schwarz, J.**
Enhancement of tissue damage by *Candida albicans* in cortisone or nitrogen mustard-treated mice
DONNA L. OBLACK, JAN SCHWARZ, and IAN ALAN HOLDER 1075
- Sekiguchi, J.**
Patulin biosynthesis: the metabolism of phyllostine and isoeopoxynon by cell-free preparations from *Penicillium urticae*
JUNICHI SEKIGUCHI and G. MAURICE GAUCHER 881
- Sekita, S.**
The production of chaetoglobosins, sterigmatocystin, O-methylsterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. Udagawa, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHARA, S. NATORI, and M. UMEDA 170

- Semu, E.**
Influence of soybean inoculation and nitrogen levels on populations and serogroups of *Rhizobium japonicum* in Ontario
ERNEST SEMU, D.J. HUME, and C.T. CORKE 739
- Shanmugam, K.T.**
Fingerprinting bacterial chromosomal DNA with restriction endonuclease *EcoRI*: comparison of *Rhizobium* spp. and identification of mutants
JONATHAN R. MIELENZ, L.E. JACKSON, F. O'GARA, and K.T. SHANMUGAM 803
- Shaw, B.G.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Shaw, K.M.**
Properties of malate dehydrogenase isolated from *Methanospirillum hungatii*
G.D. SPOTT, R.C. MCKELLAR, K.M. SHAW, J.G. GIROUX, and W.G. MARTIN 192
- Shearman, R.C.**
Nitrogen fixation associated with 'Park' Kentucky bluegrass (*Poa pratensis* L.)
R.C. SHEARMAN, W.L. PEDERSEN, R.V. KLUCAS, and E.J. KINBACHER 1197
- Shepherd, D.**
The effect of changes in pH on phosphate and potassium uptake by *Monascus rubiginosus* ATCC 16367 in submerged shaken culture
MARIETTE CARELS and DAVID SHEPHERD 1484
- Sherry, J.P.**
The occurrence of *Candida albicans* in Lake Ontario bathing beaches
J.P. SHERRY, S.R. KUCHMA, and B.J. DUTKA 1036
- Shewale, J.G.**
Enzymatic hydrolysis of cellulosic materials by *Sclerotium rolfsii* culture filtrate for sugar production
J.G. SHEWALE and J.C. SADANA 773
- Shimkets, L.J.**
A method for establishing stable concentration gradients in agar suitable for studying chemotaxis on a solid surface
LAWRENCE J. SHIMKETS, MARTIN DWORKIN, and KENNETH H. KELLER 1460
- Shum, D.T.**
Stimulation of monocyte precursors *in vivo* by an extract from *Listeria monocytogenes*
D.T. SHUM and S.B. GALSWORTHY 698
- Shum, D.T.**
Immunological properties of partially purified material with monocytoxis-producing activity from *Listeria monocytogenes*
T.V. OTOKUNEFOR, D.T. SHUM, and S.B. GALSWORTHY 706
- Sik, T.**
Phenotypic reversion of nitrogenase in pleotropic mutants of *Rhizobium meliloti*
ILONA BARABÁS and TIBOR SIK 298
- Simidu, U.**
A tentative direct microscopic method for counting living marine bacteria
KAZUHIRO KOGURE, USHIO SIMIDU, and NOBUO TAGA 415
- Sippel, J.E.**
Evaluation of bactericidal assay in serotyping *Neisseria meningitidis* group A
ALICE L. QUAN and JOHN E. SIPPEL 929
- Sjöblad, R.D.**
Characterization of an enzyme from *Rhizoctonia praticola* which polymerizes phenolic compounds
JEAN-MARC BOLLAG, ROY D. SJOBLAD, and SHU-YEN LIU 229
- Sjöblad, R.D.**
Chemotactic responses of *Vibrio alginolyticus* to algal extracellular products
ROY D. SJOBLAD and RALPH MITCHELL 964
- Smibert, R.M.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. I. Physiological aspects of enhanced aerotolerance
PAUL S. HOFFMAN, NOEL R. KRIEG, and ROBERT M. SMIBERT 1
- Smibert, R.M.**
Studies of the microaerophilic nature of *Campylobacter fetus* subsp. *jejuni*. II. Role of exogenous superoxide anions and hydrogen peroxide
PAUL S. HOFFMAN, HUGH A. GEORGE, NOEL R. KRIEG, and ROBERT M. SMIBERT 8
- Smith, R.D.**
Evaluation of an improved rapid coagglutination method for the serological grouping of beta-hemolytic streptococci
DANIEL V. LIM, ROSELLA D. SMITH, and SUSAN DAY 40
- Smith, R.L.**
Isolation of *Azospirillum* from diverse geographic regions
M.E. TYLER, J.R. MILAM, R.L. SMITH, S.C. SCHANK, and D.A. ZUBERER 693
- Snyder, S.L.**
Release of β -glucuronidase from peritoneal macrophages of normal and endotoxin-tolerant mice
STEPHEN L. SNYDER, SHARYN K. EKLUND, and RICHARD I. WALKER 1245
- Söderhäll, K.**
Activation of serum prophenoloxidase in arthropod immunity. The specificity of cell wall glucan activation and activation by purified fungal glycoproteins of crayfish phenoloxidase
KENNETH SÖDERHÄLL and TORGNY UNESTAM 406
- Sompolinsky, D.**
Further studies of a new pathogenic mycobacterium (*M. haemophilum* sp. nov.)
D. SOMPOLINSKY, ANNIE LAGZIEL, and I. ROSENBERG 217

- Sowden, L.C.**
The ultrastructure of the major species of an enriched methanogenic culture utilizing acetic acid
J. ROSS COLVIN, L.C. SOWDEN, and L. VAN DEN BERG 826
- Speirs, J.I.**
Response of various cell lines to *Escherichia coli* toxic products
J. KONGWALCHUK and J.I. SPEIRS 335
- Spence, L.**
Quantitative determination of cytomegalovirus IgG antibody by enzyme-linked immunosorbent assay (ELISA)
W.K. CHIA and L. SPENCE 1082
- Spence, L.**
Use of antisera against bovine (NCDV) and simian (SA11) rotaviruses in ELISA to detect different types of human rotavirus
F.R. BISHAE, L. SPENCE, D. GOODWIN, and R. PETRO 1118
- Spence, M.R.**
Transport of *Neisseria meningitidis* cultures: growth-supporting media and freezing as an alternative
L.A. WHITE, B.E. HOLBEIN, and M.R. SPENCE 119
- Sprott, G.D.**
Properties of malate dehydrogenase isolated from *Methanospirillum hungatii*
G.D. SPROTT, R.C. MCKELLAR, K.M. SHAW, J.G. GIROUX, and W.G. MARTIN 192
- Sprott, G.D.**
Spheroplasts of *Methanospirillum hungatii* formed upon treatment with dithiothreitol
G.D. SPROTT, J.R. COLVIN, and R.C. MCKELLAR 730
- Stankiewicz, Z.K.**
Inhibitory effect of cocoa powder on the growth of a variety of bacteria in different media
C.E. PARK, Z.K. STANKIEWICZ, M.K. RAYMAN, and A.H.W. HAUSCHILD 233
- Stan-Lotter, H.**
The influence of cations on the permeability of the outer membrane of *Salmonella typhimurium* and other gram-negative bacteria
H. STAN-LOTTER, M. GUPTA, and K.E. SANDERSON 475
- Starr, M.P.**
Synthesis and excretion of polygalacturonic acid *trans*-eliminase in *Erwinia*, *Yersinia*, and *Klebsiella* species
ARUN K. CHATTERJEE, GORDON E. BUCHANAN, MARY K. BEHRENS, and MORTIMER P. STARR 94
- Stelma, G.N., Jr.**
Physiological studies of a temperature-sensitive sporulation mutant of *Bacillus cereus* T
G.N. STELMA, JR., and H.L. SADOFF 628
- Stephens, G.R.**
Effect of additions of liquid poultry manure on excretion of degradative enzymes by bacteria in forest soil and litter
LESTER HANKIN, GEORGE R. STEPHENS, and DAVID E. HILL 1258
- Stevens, C.**
An *in vitro* comparison of some biochemical and biological properties of California and Morocco isolates of *Spiroplasma citri*
E.C.K. IGWEGBE, CLAUZELL STEVENS, and JOHN J. HOLLIS, JR. 1125
- Stevenson, I.L.**
The fine structure of mature and germinating chlamydo spores of *Fusarium oxysporum*
I.L. STEVENSON and S.A.W.E. BECKER 808
- Stevenson, I.L.**
The effect of L- α -amino-n-butyric acid on growth and production of extracellular isoleucine and valine by *Eubacterium ruminantium* and a related rumen isolate
I.L. STEVENSON 1394
- Stevenson, R.M.W.**
Amino acid uptake systems in *Bacteroides ruminicola*
ROSELYNN M.W. STEVENSON 1161
- Stewart, B.J.**
ICMSF methods studies. XIII. An international comparative study of the MPN procedure and the Anderson-Baird-Parker direct plating method for the enumeration of *Escherichia coli* biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG, J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN, S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST, P.M. NOTTINGHAM, and B.J. STEWART 1321
- Stewart, G.G.**
Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 888
- Stewart, G.G.**
Erratum: Changes in electrophoretic mobility and lytic enzyme activity associated with development of flocculating ability in *Saccharomyces cerevisiae*
M.J. BEAVAN, DIANE M. BELK, G.G. STEWART, and A.H. ROSE 1489
- Stewart, G.J.**
Effect of divalent cations on the inhibition of alkyl-sulfatase induction and the generation of ATP in *Pseudomonas aeruginosa* after exposure to exogenous uridine 5'-triphosphate
GREGORY J. STEWART and JOHN W. FITZGERALD 1008
- Stewart, I.O.**
Auxanographic grouping and typing of *Neisseria gonorrhoeae*
A.T. HENDRY and I.O. STEWART 512
- Stewart, I.O.**
Silver-resistant enterobacteriaceae from hospital patients
A.T. HENDRY and I.O. STEWART 915
- Stoltz, D.B.**
Penetration into caterpillar cells of virus-like particles injected during oviposition by parasitoid ichneumonid wasps
DONALD B. STOLTZ and S. BRADLEIGH VINSON 207
- Stotzky, G.**
Differential toxicities of mercury to bacteria and bacteriophages in sea and in lake water
H. BABICH and G. STOTZKY 1252

- Stratton, G.W.**
The effect of nickel on the growth, photosynthesis, and nitro-
genase activity of *Anabaena inaequalis*
GLENN W. STRATTON and CHARLES T. CORKE 1094
- Sundman, V.**
Partial characterization of a new C3-type capsule-dissolving
phage of *Streptococcus cremoris*
MAIDA-LIISA SAXELIN, Eeva-Liisa NURMIAHO, M.P. KORHOLA,
and VERONICA SUNDMAN 1182
- Sylvestre, M.**
Production of an extracellular ribonuclease by *Pseudomonas*
Maltophilia
M. ARELLA and M. SYLVESTRE 321
- Taga, N.**
A tentative direct microscopic method for counting living marine
bacteria
KAZUHIRO KOGURE, USHIO SIMIDU, and NOBUO TAGA 415
- Takahashi, I.**
Catabolite repression-resistant mutants of *Bacillus subtilis*
I. TAKAHASHI 1283
- Tam, T.-Y.**
Effects of sulfide and acetylene on nitrous oxide reduction by soil
and by *Pseudomonas aeruginosa*
TAT-YEE TAM and ROGER KNOWLES 1133
- Tannock, G.W.**
Indigenous bacteria influence the number of *Salmonella typhimu-*
rium in the ileum of gnotobiotic mice
SALLY ROADH and GERALD W. TANNOCK 1352
- Tesone, S.**
Addendum: Survie de *Staphylococcus aureus* au cours de la
préparation et de la conservation de lait écrémé en poudre.
Problèmes posés par le dénombrement des survivants
A. CHOPIN, SILVIA TESONE, J.-P. VILA, Y. LE GRAET et
G. MOCQUOT 237
- Thomas, R.S.**
High yields of coatless spores of *Clostridium perfringens* strain 8-6
in a defined medium
L.E. SACKS and R.S. THOMAS 642
- Tilton, R.C.**
Release of rhodanese from *Pseudomonas aeruginosa* by cold shock
and its localization within the cell
R.W. RYAN, M.P. GOURLIE, and R.C. TILTON 340
- Tisa, L.S.**
The physiological effects of restrictive environmental conditions
on *Dictyostelium discoideum* spore germination
DAVID A. COTTER, FREDERICK J. GARNISH, and
LOUIS S. TISA 24
- Tison, D.L.**
Dissolved organic matter utilization and oxygen uptake in algal-
bacterial microcosms
DAVID L. TISON and A.J. LINGG 1315
- Tochikura, T.**
Purification and some properties of uridine diphosphate *N*-ace-
tylglucosamine pyrophosphorylase from *Neurospora crassa*
KENJI YAMAMOTO, MITSUAKI MORIGUCHI, HIROYASU KAWAI,
and TATSUROKURO TOCHIKURA 1381
- Tong, T.**
ICMSF methods studies. XIII. An international comparative
study of the MPN procedure and the Anderson-Baird-Parker
direct plating method for the enumeration of *Escherichia coli*
biotype I in raw meats
M.K. RAYMAN, G.A. JARVIS, C.M. DAVIDSON, S. LONG,
J.M. ALLEN, T. TONG, P. DODSWORTH, S. McLAUGHLIN,
S. GREENBERG, B.G. SHAW, H.J. BECKERS, S. QVIST,
P.M. NOTTINGHAM, and B.J. STEWART 1321
- Totten, P.A.**
Transduction of penicillinase production in *Staphylococcus*
epidermidis and nature of the genetic determinant
W.C. OLSON, JR., J.T. PARISI, P.A. TOTTON, and
J.N. BALDWIN 508
- Tremblay, L.**
DNA base composition, nature of intracellular DNA, morphol-
ogy, and classification of bacteriophages infecting *Micrococcus*
luteus
SCOTT W. COMPTON, JOHN A. MAYO, MELANI EHRLICH,
H.-W. ACKERMANN, LISE TREMBLAY, C.E. CORDS, and
J.V. SCALETTI 1027
- Trinel, P.A.**
Etude d'un groupe nouveau d'Enterobacteriaceae (groupe H₁)
apparenté à l'espèce *Enterobacter cloacae*
D. IZARD, F. GAVINI, P.A. TRINEL et H. LECLERC 713
- Trinick, M.J.**
Structure of nitrogen-fixing nodules formed by *Rhizobium* on
roots of *Parasponia andersonii* Planch.
M.J. TRINICK 565
- Trudel, M.**
Polioviruses as indicator of virological quality of water
PIERRE PAYMENT, YOLANDE LAROSE, and
MICHEL TRUDEL 1212
- Trudel, M.**
Polioviruses and other enteroviruses in urban sewage from Laval
(Canada): presence of wild strains of poliovirus
P. PAYMENT, Y. LAROSE, and M. TRUDEL 1305
- Trudinger, P.A.**
Thiosulfate formation and associated isotope effects during sulfite
reduction by *Clostridium Pasteurianum*
L.A. CHAMBERS and P.A. TRUDINGER 719
- Trust, T.J.**
Aquarium pets as a source of antibiotic-resistant salmonellae
T.J. TRUST and KAREN H. BARTLETT 535
- Trust, T.J.**
Deoxyribonucleic acid relationships among members of the genus
Aeromonas
JAN I. MACINNES, TREVOR J. TRUST, and
JORGE H. CROSA 579
- Trust, T.J.**
Erratum: Deoxyribonucleic acid relationships among members of
the genus *Aeromonas*
JAN I. MACINNES, TREVOR J. TRUST, and
JORGE H. CROSA 1489

- Tyler, M.E.**
Isolation of *Azospirillum* from diverse geographic regions
M.E. TYLER, J.R. MILAM, R.L. SMITH, S.C. SCHANK, and
D.A. ZUBERER 693
- Udagawa, S.**
The production of chaetoglobosins, sterigmatocystin, *O*-methyl-sterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. UDAGAWA, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHARA, S. NATORI, and M. UMEDA 170
- Umeda, M.**
The production of chaetoglobosins, sterigmatocystin, *O*-methyl-sterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. UDAGAWA, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHARA, S. NATORI, and M. UMEDA 170
- Unemoto, T.**
Regulation of internal solute concentrations of marine *Vibrio alginolyticus* in response to external NaCl concentration
TSUTOMU UNEMOTO and MAKI HAYASHI 922
- Unestam, T.**
Activation of serum prophenoloxidase in arthropod immunity. The specificity of cell wall glucan activation and activation by purified fungal glycoproteins of crayfish phenoloxidase
KENNETH SÖDERHÄLL and TORGNY UNESTAM 406
- Vahlefeld, R.**
ICMSF methods studies. XII. Comparative study for the enumeration of *Clostridium perfringens* in feces
A.H.W. HAUSCHILD, P. DESMARCHÉLIER, R.J. GILBERT, S.M. HARMON, and R. VAHLEFELD 953
- van Brussel, A.A.N.**
Nitrogen fixation by *Rhizobium* sp. 32H1. A morphological and ultrastructural comparison of symbiotic and nitrogen-fixing forms
A.A.N. VAN BRUSSEL, J.W. COSTERTON, and J.J. CHILD 352
- van den Berg, L.**
The ultrastructure of the major species of an enriched methanogenic culture utilizing acetic acid
J. ROSS COLVIN, L.C. SOWDEN, and L. VAN DEN BERG 826
- Van Etten, J.L.**
Polyadenylate-containing RNA in dormant and germinating *Botryodiplodia theobromae* pycnidiospores
JAMES L. VAN ETEN and CARROLL D. RAWN 375
- Vidaver, A.K.**
Bacteriocins of phytopathogenic *Corynebacterium* species
D.C. GROSS and A.K. VIDAVER 367
- Vijay, H.M.**
Induction of reaginic (IgE) gonococcal antibodies in the rat by a common antigen of *Neisseria gonorrhoeae*
F.E. ASHTON, H.M. VIJAY, G. LAVERGNE, B. BRODEUR, and B.B. DIENA 138
- Vila, J.-P.**
Addendum: Survie de *Staphylococcus aureus* au cours de la préparation et de la conservation de lait écrémé en poudre. Problèmes posés par le dénombrement des survivants
A. CHOPIN, SILVIA TESONE, J.-P. VILA, Y. LE GRAET et G. MOCOQUOT 237
- Vincent, J.M.**
Effect of a bacteriophage on the colonisation and nodulation of clover roots by a strain of *Rhizobium trifolii*
J. EVANS, Y.M. BARNET, and J.M. VINCENT 968
- Vincent, J.M.**
Effect of a bacteriophage on colonisation and nodulation of clover roots by paired strains of *Rhizobium trifolii*
J. EVANS, Y.M. BARNET, and J.M. VINCENT 974
- Vincent, W.F.**
Uptake of [¹⁴C]methylammonium by plankton communities: a comparative assay for ammonium transport systems in natural waters
WARWICK F. VINCENT 1401
- Vinson, S.B.**
Penetration into caterpillar cells of virus-like particles injected during oviposition by parasitoid ichneumonid wasps
DONALD B. STOLTZ and S. BRADLEIGH VINSON 207
- Wagner, R.J.**
Cache Valley virus: isolations from mosquitoes in Saskatchewan, 1972-1974
J.O. IVERSEN, R.J. WAGNER, M.K. LEUNG, L.B. HAYLES, and J.R. McLINTOCK 760
- Walker, R.I.**
Release of β -glucuronidase from peritoneal macrophages of normal and endotoxin-tolerant mice
STEPHEN L. SNYDER, SHARYN K. EKLUND, and RICHARD I. WALKER 1245
- Wardlaw, A.C.**
Degradation of bacterial lipopolysaccharide by the slime mould *Physarum polycephalum*
JOHN N. SADDLER, JOHN G. COOTE, and ALASTAIR C. WARDLAW 124
- Wardrop, A.B.**
Ultrastructural studies on the cell walls in *Fusarium sulphureum*
EDWARD F. SCHNEIDER and ALAN B. WARDROP 75
- Warren, R.A.J.**
Mixed bacteriophage infection of *Escherichia coli*: exclusion of superinfecting T4 by T7
R.R. LOEWEN, R.C. MILLER, JR., and R.A.J. WARREN 867
- Watts, T.H.**
Biochemical studies on pili isolated from *Pseudomonas aeruginosa* strain PAO
W. PARANCHYCH, P.A. SASTRY, L.S. FROST, M. CARPENTER, G.D. ARMSTRONG, and T.H. WATTS 1175
- Weber, J.**
A dominant temperature-sensitive assembly mutant of adenovirus type 2
ERIC B. CARSTENS, JOHANNE MAGNAN, and JOSEPH WEBER 646
- Weete, J.D.**
Mycelial lipids as an aid in identifying rust fungi in culture—*Cronartium fusiforme*
J.D. WEETE, W.D. KELLEY, and C.A. HOLLIS 1481

- Weinberger, M.**
Plasmid-determined 2-hydroxypyridine utilization by *Arthrobacter crystallopoietes*
M. WEINBERGER and P.E. KOLENBRANDER 329
- Welch, B.**
Chlortetracycline and sulfonamide resistance of fecal bacteria in swine receiving medicated feed
B. WELCH and C.W. FORSBERG 789
- Wells, C.**
The mitogenic activity of lipopolysaccharide for spleen cells from germfree, conventional, and gnotobiotic rats
CAROL WELLS and EDWARD BALISH 1087
- Westlake, D.W.S.**
Crude oil utilization by fungi
J.S. DAVIES and D.W.S. WESTLAKE 146
- Westlake, D.W.S.**
Biosynthesis of chloramphenicol in *Streptomyces* species 3022a: the nature of the arylamine synthetase system
M.M. FRANCIS and D.W.S. WESTLAKE 1408
- White, F.**
Isolation of a non-tumor-inducing mutant of the Ti plasmid of *Agrobacterium tumefaciens* strain B₆
BARBARA J. RAPP, JOHN D. KEMP, and FRANK WHITE 291
- White, L.A.**
Transport of *Neisseria meningitidis* cultures: growth-supporting media and freezing as an alternative
L.A. WHITE, B.E. HOLBEIN, and M.R. SPENCE 119
- Whitmoyer, R.E.**
Adherence of bacteria to leaves
CURT LEBEN and ROBERT E. WHITMOYER 896
- Wicklow, D.T.**
Evidence of a competitive hierarchy among coprophilous fungal populations
DONALD T. WICKLOW and B.J. HIRSCHFIELD 855
- Wong, P.P.**
Nitrate reductase activities of rhizobia and the correlation between nitrate reduction and nitrogen fixation
JAMES R. MANHART and PETER P. WONG 1169
- Woods, R.A.**
Isolation and characterisation of guanine auxotrophs in *Saccharomyces cerevisiae*
W.J.E. GARDNER and R.A. WOODS 380
- Yamamoto, K.**
Purification and some properties of uridine diphosphate *N*-acetylglucosamine pyrophosphorylase from *Neurospora crassa*
KENJI YAMAMOTO, MITSUAKI MORIGUCHI, HIROYASU KAWAI, and TATSUROKURO TOCHIKURA 1381
- Yarbrough, J.M.**
The effect of phenazine methosulfate-ascorbate on bacterial active transport and adenosine triphosphate formation: inhibition of *Pseudomonas aeruginosa* and stimulation of *Escherichia coli*
R.G. EAGON, T.W. HODGE, III, J.B. RAKE, and J.M. YARBROUGH 798
- Yoshihira, K.**
The production of chaetoglobosins, sterigmatocystin, *O*-methylsterigmatocystin, and chaetocin by *Chaetomium* spp. and related fungi
S. UDAGAWA, T. MUROI, H. KURATA, S. SEKITA, K. YOSHIHIRA, S. NATORI, and M. UMEDA 170
- Youmans, J.**
Effect of irradiance upon the population of *Pseudomonas coronafaciens* in leaves and symptom expression of halo blight of rye
BARRY M. CUNFER and JOHN YOUMANS 163
- Yousten, A.A.**
Comparative studies of the mosquito-larval toxin of *Bacillus sphaericus* SSII-1 and 1593
PAULA MYERS, ALLAN A. YOSTEN, and ELIZABETH W. DAVIDSON 1227
- Zacek, M.**
Hydroxylase regulation in *Candida tropicalis* grown on alkanes
MICHÉLE GILEWICZ, MARCELLE ZACEK, JEAN-CLAUDE BERTRAND, and EDGARD AZOULAY 201
- Zachary, A.**
Ecology and taxonomy of bacteria attaching to wood surfaces in a tropical harbor
B. AUSTIN, D.A. ALLEN, A. ZACHARY, M.R. BELAS, and R.R. COLWELL 447
- Zuberer, D.A.**
Isolation of *Azospirillum* from diverse geographic regions
M.E. TYLER, J.R. MILAM, R.L. SMITH, S.C. SCHANK, and D.A. ZUBERER 693

**CANADIAN JOURNAL OF MICROBIOLOGY/
JOURNAL CANADIEN DE MICROBIOLOGIE
VOLUME 25 (1979)
SUBJECT INDEX/INDEX DES MATIERES**

- Abomasum epithelium bacteria phosphatase 932
Acetic acid methanogenic culture 826
Acetoin dehydrogenase *Bacillus* mutant sporulation 1283
Acetylene *Pseudomonas* nitrous oxide redn 1133
Acholeplasma electron microscopy 1373
Acinetobacter collagenase induction repression 611
Acrylic acid *Vibrio* chemotaxis 964
Actinomycetes lignocellulose metab 1270
Adenovirus temp sensitive mutant 646
Adjuvant immune lipopolysaccharide chain 640
Aeromonas taxonomy DNA homol 579
Aeromonas taxonomy DNA homol correction 1489
Aflatoxin corn fermn degrdn feed 911
Agar antiserum method *Neisseria* 784
Agar chem gradient chemotaxis 1460
Agar *Yersinia* selective 1298
Agaricus spore wall compn structure 32
Aggregation sex development *Dictyostelium* 1416
Agrobacterium plasmid Ti virulence 291
Agrobacterium polymyxin resistance crown gall 185
Alces antibodies *Fasciola* 788
Algae bacteria org matter oxygen 1315
Algae nickel toxicity 1094
Algae product *Vibrio* chemotaxis 964
Alk phosphatase detn *Escherichia* phosphate uptake 560
Alk phosphatase stomach ruminant 932
Alkane *Candida* hydroxylase regulation 201
Alkylsulfatase induction *Pseudomonas* UTP magnesium 1008
Allergen *Neisseria* nucleoprotein 138
Amidase *Saccharomyces* flocculation 888
Amidase *Saccharomyces* flocculation correction 1489
Amino acid analog susceptibility *Cephalosporium* 818
Amino acid sporulation germination *Clostridium* 522
Amino acid transport *Bacteroides* 1161
Aminobutyrate *Eubacterium* isoleucine valine formation 1394
Aminoglycoside penicillin synergism detn 1232
Amitrole induced sporulation *Saccharomyces* um 650
Ammonium methylammonium transport plankton 1401
AMP cyclic *Neisseria* 235
AMP *Myxococcus* chemotaxis 1214
Amphora mannose transport 605
Anabaena nickel toxicity 1094
Animal cell *Escherichia* toxic product 335
Antibiotic formation *Pseudomonas* phage 1108
Antibiotic resistance elimination *Staphylococcus* 1476
Antibiotic resistance *Salmonella* 535
Antibiotic resistance *Spiroplasma* metab 1125
Antibiotic resistance *Staphylococcus* plasmid 1468
Antibiotic resistance *Staphylococcus* plasmid transduc= tion 508
Antibiotic sensitivity *Salmonella* *Escherichia* cation 475
Antibiotic *Staphylococcus* sensitivity *Candida* 429
Antibiotic synergism detn 1232
Antibodies *Fasciola* moose 788
Antibody detection *Brucella* human serum 850
Antibody IgG cytomegalovirus ELISA 1082
Antibody rabies virus electron microscopy 1209
Antigen gonococcus IgE 138
Antiserum agar method *Neisseria* 784
Antiserum rotavirus ELISA 1118
Aphanomyces glycoprotein prophenol oxidase activation 406
App gradient agar chemotaxis 1460
App media inoculation 1111
Apple leaf litter pesticide microorganism 1331
Arsenate metab *Candida* radioassay 1201
Arsenic metab *Candida* radioassay 1201
Arsenical metab radioassay *Candida* 1201
Arthrobacter hydroxypyridine metab plasmid 329
Arthrobacter oxygen growth nitrogen fixation 746
Arthrobacter thiocyanate metab 1277
Arthrospore *Trichophyton* temp medium atm 362
Arylamine synthetase *Streptomyces* 1408
Asparaginase *Chlamydomonas* asparagine metab 1443
Asparagine metab asparaginase *Chlamydomonas* 1443
Asparvenone *Aspergillus* 130
Aspergillus naphthalenone 130
Assay *Rhizoctonia* soil debris 110
ATP formation bacteria phenazine methasulfate 798
Auxanog typing *Neisseria* 512
Azospirillum grass roots tropical 693
Azospirillum maize root infection 1264
Azotobacter lipid oxygen tension 1239
Bacilli tubercle transmittable modification 462
Bacillus bacteriophage SP 1345
Bacillus carbon nutrition taxonomy 491
Bacillus infection pathogenesis *Culex* Larvae 178
Bacillus inhibition cocoa 233
Bacillus mutant sporulation catabolite repression 1283
Bacillus sporulation mutant metab 628
Bacillus toxin sporulation mosquito larva 1227
Bacteria adherence leaf 896
Bacteria algae org matter oxygen 1315
Bacteria anaerobic cultivation enumeration 987
Bacteria exoenzyme poultry manure 1258
Bacteria inhibitor cocoa 233
Bacteria intestine polymyxin B 995
Bacteria lipopolysaccharide *Physarum* 124
Bacteria magnetic field effect 1145
Bacteria maize root infection 1264
Bacteria marine counting living 415
Bacteria *Poa* nitrogen fixation 1197
Bacteria river sediment 1058
Bacteria stomach ruminant phosphatase 932
Bacteria swine chlortetracycline feed 789
Bacteria wastewater seawater pollution 1073
Bacteria water ecol 1433
Bacteria wood biofouling 447
Bactericide resistance *Spiroplasma* metab 1125
Bacteriocin phytopathogenic *Corynebacterium* 367
Bacteriophage particles spirochete 114
Bacteriophage SP *Bacillus* 1345
Bacteroidaceae cellulose metab sewage sludge 1427

- Bacteroides* amino acid transport 1161
Bacteroides identification phenylacetate 927
 Beet seed colonization *Rhizoctonia* assay 110
 Beet soil *Rhizoctonia* 902
 Benthic marine food chain *Vibrio* transfer 499
 Beta galactosidase induction *Streptomyces* 833
 Betahemolytic streptococci serol grouping 40
 Biofouling wood bacteria 447
 Botryodiplodia spore polyadenylate contg RNA 375
 Brucella antibody detection human serum 850
 Burn bacteria silver resistance 915
 Burn *Pseudomonas* virulence protease elastase 593
 Cache valley virus mosquitoes 760
 Calcium *Salmonella* *Escherichia* outer membrane 475
 Campylobacter oxygen tolerance 1
 Campylobacter oxygen tolerance superoxide peroxide 8
 Candida age chlamydospore metab germination 765
 Candida alkane hydroxylase regulation 201
 Candida arsenical metab radioassay 1201
 Candida Lake Ontario beach 1036
 Candida magnetic field effect 1145
 Candida mutant protoplast snail enzyme 486
 Candida *Staphylococcus* antimicrobial sensitivity 429
 Candida tissue damage cortisone 1015
 Canine plaque distemper virus 680
 Capsule *Streptococcus* phage milk 1182
 Carbon nutrition taxonomy *Bacillus* 491
 Carbon source *Cephalosporium* amino acid analog 818
 Carotene *Halobacterium* glycerol 1288
 Carotenoid pigment formation *Halobacterium* 1292
 Carotenoid pigment *Halobacterium* glycerol 1288
 Casein cocoa toxicity bacteria 233
 Catabolite repression *Bacillus* mutant sporulation 1283
 Catalase *Proteus* formation regulation 302
 Caterpillar cells virus like particles 207
 Cell cycle mycophenolate *Penicillium* 940
 Cell division *Escherichia* platinum 545
 Cell *Fusarium* walls 75
 Cell interaction *Myxococcus* *fimbriae* 1359
 Cellulase streptomycete screening 858
 Cellulose metab *Bacteroidaceae* 1427
 Cellulose saccharification *Sclerotium* 773
 Cellulose straw fungi protein 793
 Cephalosporin prodn *Streptomyces* nitrogen 61
 Cephalosporium amino acid analog carbon source 818
 Chaetocin *Chaetomium* 170
 Chaetoglobosin *Chaetomium* 170
 Chaetomium mycotoxin 170
 Chain lipopolysaccharide immune adjuvant 640
 Chem gradient agar chemotaxis 1460
 Chemotaxis agar chem gradient 1460
 Chemotaxis *Dictyostelium* sex development 1416
 Chemotaxis *Dictyostelium* sexual development 542
 Chemotaxis *Myxococcus* cyclic GMP AMP 1214
 Chemotaxis *Vibrio* algae product 964
 Chilo iridescent virus protein 841
 Chitin chitosan spore wall *Agaricus* 32
 Chitosan chitin spore wall *Agaricus* 32
 Chlamydomonas asparagine metab asparaginase 1443
 Chlamydospore *Fusarium* mature 808
 Chlamydospore metab germination *Candida* age 765
 Chloramphenicol foormation *Stretomyces* enzyme 1408
 Chloride mercury ion toxicity 1252
 Chlorobium metab photosynthesis lake 999
 Chlortetracycline feed swine bacteria 789
 Ciliary activity test virus 279
 Clostridium coatless spores 642
 Clostridium feces ICMSF 953
 Clostridium nitrogen fixation ecol 947
 Clostridium sporulation germination amino acid 522
 Clostridium thiosulfate formation sulfite redn 719
 Clover root nodulation phage *Rhizobium* 968 974
 Coatless spores *Clostridium* 642
 Cochliobolus straw cellulose protein 793
 Cocoa bacteria inhibitor 233
 Cold rhodanese *Pseudomonas* 340
 Collagenase induction repression *Acinetobacter* 611
 Color test inositol assimilation *Cryptococcus* 1188
 Comamonas tyrosine sulfate sulfohydrolase location 275
 Competitive hierarchy fungus 855
 Conidia *Kabatiella* media 1100
 Conidia pigment *Monascus* transport pH 1484
 Corn aflatoxin ferml degrdn feed 911
 Cortisone *Candida* tissue damage 1015
Corynebacterium phytopathogenic bacteriocin 367
Corynebacterium toxin toxicity nucleotide 285
 Counting living marine bacteria 415
 Coxiella PHA lymphocyte cynomolgus monkey 949
 Crayfish prophenol oxidase activation 406
 Cronartium sterol fatty acid taxonomy 1481
 Crown gall polymyxin resistance *Agrobacterium* 185
Cryptococcus identification medium 1116
Cryptococcus inositol assimilation detn 1188
Culex larva *Bacillus* toxin 1227
Culex Larvae pathogenesis *Bacillus* infection 178
 Cultivation bacteria anaerobic 987
 Culture medium *Clostridium* sporulation 522
 Cyclic AMP *Neisseria* 235
 Cyclic GMP *Myxococcus* chemotaxis 1214
Cylindrochadium germinability low temp 157
 Cynomolgus monkey Coxiella PHA lymphocyte 949
 Cytomegalovirus cell transformation 254
 Cytomegalovirus IgG antibody ELISA 1082
 Cytomegalovirus latent infection activation review 245
 Cytomegalovirus man mice latency activation 261
 Dehydrogenase acetoin *Bacillus* mutant sporulation 1283
 Dehydrogenase IMP *Saccharomyces* gene 380
 Dehydrogenase isoeoxydon *Penicillium* 881
 Dehydrogenase malate *Methanospirillum* 192
 Development sex *Dictyostelium* aggregation 1416
Dictyostelium aggregation sex development 1416
Dictyostelium chemotaxis sexual development 542
Dictyostelium spore germination 24
 Differentiation *Mycobacterium* trimethoprim 991
 Dimethyl sulfoxide *Vibro* chemotaxis 964
 Diplodia nitrogen enzyme 167
 Distemper virus plaque canine 680
 Dithiothreitol *Methanospirillum* spheroplast formation 730
 DNA fingerprint *Rhizobium* taxonomy 803
 DNA homol *Aeromonas* taxonomy 579
 DNA homol *Aeromonas* taxonomy correction 1489
 DNA hybridization *Enterobacteriaceae* taxonomy 713
 DNA labeling thymidine incorporation *Rhizobium* 675
 DNA phage taxonomy *Micrococcus* 1027
 DNA *Salmonella* phage 1063
 Ecol water bacteria 1433
 Elastase protease toxin virulence *Pseudomonas* 593
 Electrolyte *Vibrio* sodium chloride 922
 Electron microscopy *Acholeplasma* 1373
 Electron microscopy rabies virus antibody 1209
 Elution poliovirus filter membrane 1045
 Endotoxin shock macrophage glucuronidase 1245
Enterobacter taxonomy DNA hybridization 713
Enterobacteriaceae silver resistance 915
Enterobacteriaceae taxonomy DNA hybridization 713
 Enzyme exo bacteria poultry manure 1258

- Enzyme nitrogen *Diplodia* 167
 Enzyme snail *Candida* mutant protoplast 486
 Enzymic *Staphylococcus* detn food 44
 Epithelial cells *Treponema* mammalian 399
 Epithelium stomach ruminant phosphatase 932
 Epstein Barr virus cell transformation 254
Erwinia polygalacturonate transeliminase 94
 Erythrocyte binding *Staphylococcus* toxoid 1219
Escherichia biotype raw meat 1321
Escherichia cell division platinum 545
Escherichia fructose diphosphate aldolase gene 937
Escherichia outer membrane ghost 436
Escherichia outer membrane protein 423
Escherichia peptidoglycan formation guanosine tetra-
 phosphate 1206
Escherichia phage T4 T7 infection 867
Escherichia phosphate uptake alk phosphatase detn
 560
Escherichia *Salmonella* outer membrane cation 475
Escherichia stressed cells 116
Escherichia toxic product animal cell 335
Eubacterium aminobutyrate isoleucine valine formation
 1394
 Eukaryote origin prokaryote review 651
 Evolution eukaryote origin review 651
 Exoenzyme bacteria poultry manure 1258
Fasciola *Alces* antibodies 788
Fasciola antibodies moose 788
 Fatty acid *Azotobacter* lipid oxygen 1239
 Fatty acid *Cronartium* taxonomy 1481
 Fatty acid *Rhizobium* taxonomy 68
Feces *Clostridium* ICMSF 953
 Feed chlortetracycline swine bacteria 789
 Feed corn aflatoxin degrading 911
 Filter membrane elution poliovirus 1045
 Fimbriae function cell interaction *Myxococcus* 1359
 Fimbriae *Myxococcus* 1152
 Fimbriae *Pseudomonas* 1175
 Fluorescence degrading laser FTA ABS immunofluores-
 cence 1479
 Fluorocytosine *Staphylococcus* sensitivity *Candida*
 429
 Food *Staphylococcus* detn 44
 Food *Staphylococcus* enumeration medium 1052
 Forest soil electron microscopy 943
 Frog *Salmonella* antibiotic resistance 535
 Fructose diphosphate aldolase gene *Escherichia* 937
 Fungi oil metab 146
 Fungi straw cellulose protein 793
 Fungus competitive hierarchy 855
Fusarium cell walls 75
Fusarium macroconidia thiol 618
Fusarium mature chlamydospore 808
Fusarium root rhizosphere soil spinach 227
 Galactosidase beta induction *Streptomyces* 833
 Gall crown polymyxin resistance *Agrobacterium* 185
 Gene fructose diphosphate aldolase *Escherichia* 937
 Gene GMP synthetase *Saccharomyces* 380
 Genes *Pseudomonas* transfer integration 637
 Genetics *Saccharomyces* guanine metab 380
 Germinability *Cylindrochadium* low temp 157
 Germinating chlamydospore *Fusarium* 808
 Germination *Candida* chlamydospore age metab 765
 Germination spore parasitism survival *Sporidesmium*
 1021
 Germination sporulation amino acid *Clostridium* 522
 Glucose lactose diauxie *Escherichia* peptidoglycan
 1206
 Glucuronidase macrophage endotoxin shock 1245
 Glycerol *Halobacterium* carotenoid pigment 1288
 Glycerol *Mycobacterium* viability 600
 Glycolic acid *Vibrio* chemotaxis 964
 Glycoprotein *Aphanomyces* prophenol oxidase activa-
 tion 406
 GMP cyclic *Myxococcus* chemotaxis 1214
 GMP synthetase *Saccharomyces* gene 380
 Gnotobiotic mice *Salmonella* 1352
Gonococcus antigen IgE 138
 Gradient chem agar chemotaxis 1460
 Grass nitrogen fixation bacteria 1197
 Grass roots tropical *Azospirillum* 693
 Guanine metab *Saccharomyces* genetics 380
 Guanosine tetraphosphate *Escherichia* peptidoglycan
 formation 1206
Halobacterium carotenoid pigment formation 1292
Halobacterium carotenoid pigment glycerol 1288
 Hemagglutination inhibition rubella lipoprotein 103
 Heparin manganese chloride rubella hemagglutination
 103
 Herpes simplex cell transformation 254
 Herpes virus cell transformation 254
 Herpes virus replication latency review 239
 Herpesvirus latency immune control 267
 Human serum *Brucella* antibody detection 850
 Hydrazine metab nitrogen source *Pseudomonas* 822
 Hydrogen peroxide *Proteus* resistance 312
 Hydrolase *Saccharomyces* flocculation 888
 Hydroxylase regulation *Candida* alkane 201
 Hydroxypyridine metab *Arthrobacter* plasmid 329
Ichneumonid wasp caterpillar cells 207
 IgE *gonococcus* antigen 138
 IgG antibody cytomegalovirus ELISA 1082
 Immune adjuvant lipopolysaccharide chain 640
 Immune control herpesvirus latency 267
 Immunofluorescence FTA ABS fluorescence degrading
 laser 1479
 Immunol monocytosis *Listeria* 706
 IMP dehydrogenase *Saccharomyces* gene 380
 Infection cytomegalovirus latent activation review 245
 Infection maize root microorganism 1264
 Influenza vaccine live 279
 Inoculation media app 1111
 Inositol assimilation detn *Cryptococcus* 1188
 Insect plant spiroplasma grouping 861
 Intestine bacteria polymyxin B 995
 Invertase spheroplast *Saccharomyces* 528
 Iridescent virus protein *Chilo* 841
 Iridovirus 6 protein 841
 Iron transport *Campylobacter* 1
 Isoeopoxydon dehydrogenase *Penicillium* 881
 Isoleucine formation *Eubacterium* aminobutyrate
 1394
 Isotope effect sulfite metab *Salmonella* 1387
 Isotope effect sulfur *Clostridium* 719
Kabatiella conidia media 1100
 Ketogluconate *Rhizobium* polysaccharide formation
 1191
Klebsiella polygalacturonate transeliminase 94
 Laccase *Rhizoctonia* 229
 Lactose glucose diauxie *Escherichia* peptidoglycan
 1206
 Lake *Chlorobium* metab photosynthesis 999
 Lake water ammonium transport 1401
 Laser FTA ABS immunofluorescence fluorescence
 degrading 1479
 Latency activation cytomegalovirus man mice 261
 Latency herpesvirus immune control 267
 Leaf adherence bacteria 896
 Leaf apple litter pesticide microorganism 1331
 Light rye halo blight 163
 Lignocellulose metab *Streptomyces* 1270
 Lipid *Azotobacter* oxygen tension 1239
 Lipid *Halobacterium* glycerol 1288
 Lipopolysaccharide bacteria *Physarum* 124

- Lipopolysaccharide chain immune adjuvant 640
 Lipopolysaccharide outer membrane *Escherichia* 436
 Lipopolysaccharide *Pseudomonas* mutant 390
 Lipopolysaccharide spleen mitogenesis 1087
 Lipoprotein rubella hemagglutination inhibition 103
Listeria immunol monocytosis 706
 Lymphocyte PHA *Coxiella cynomolgus* monkey 949
 Macrophage glucuronidase endotoxin shock 1245
 Manganese *Pseudomonas* UTP alkylsulfatase induction 1008
 Magnesium *Salmonella* *Escherichia* outer membrane 475
 Magnetic field effect microorganism 1145
 Maize root infection microorganism 1264
 Malate dehydrogenase *Methanospirillum* 192
 Mammalian epithelial cells *Treponema* 399
 Manganese chloride heparin rubella hemagglutination 103
 Mannose transport *Amphora* 605
 Mannosidase *Saccharomyces flocculation* 888
 Manure poultry bacteria exoenzyme 1258
 Marine bacteria counting living 415
 Marine food chain benthic *Vibrio* transfer 499
 Meat raw *Escherichia* biotype 1321
 Membrane filter elution poliovirus 1045
 Membrane outer cation *Salmonella* *Escherichia* 475
 Membrane outer protein *Escherichia* 423
 Membrane staphylococcal alpha toxin binding 686
 Mercury toxicity water pollutant 1252
 Methanogenic culture acetic acid 826
Methanospirillum malate dehydrogenase 192
Methanospirillum spheroplast formation dithiothreitol 730
 Methionine transport *Pseudomonas* 1103
 Methylammonium ammonium transport plankton 1401
 Methylasparvenone *Aspergillus* 130
 Methylsterigmatocystin *Chaetomium* 170
Micrococcus inhibition cocoa 233
Micrococcus nuclease halophilic prodn 1113
Micrococcus phage DNA taxonomy 1027
 Microorganism apple leaf litter pesticide 1331
 Microorganism chemotaxis agar gradient 1460
 Microorganism magnetic field effect 1145
 Microorganism maize root infection 1264
 Microorganism org matter oxygen 1315
 Microscopy electron rabies virus antibody 1209
 Milk skim powd *Staphylococcus* survival 237
 Milk *Streptococcus* capsule phage 1182
 Min tubular forms soil 722
 Mitogenesis spleen lipopolysaccharide 1087
Monascus phosphate potassium transport pH 1484
 Monkey *cynomolgus* *Coxiella* PHA lymphocyte 949
 Monocyte precursors *Listeria* 698
 Monocytosis immunol *Listeria* 706
 Moose antibodies *Fasciola* 788
 Mosquito larva *Bacillus* toxin 1227
 Mosquitoes virus Cache valley 760
 Mutant adenovirus temp sensitive 646
 Mutant *Bacillus* sporulation catabolite repression 1283
Mycobacterium differentiation trimethoprim 991
Mycobacterium pathogenic studies 217
Mycobacterium transmittable modification 462
Mycobacterium viability glycerol 600
 Mycophenolate *Penicillium* cell cycle 940
 Mycotoxin antibacterial activity 421
 Mycotoxin *Chaetomium* 170
 Myxococcus chemotaxis AMP 1460
 Myxococcus chemotaxis cyclic GMP AMP 1214
 Myxococcus fimbriae 1152
 Myxococcus fimbriae function cell interaction 1359
 Naphthalenone *Aspergillus* 130
 Natural water plankton ammonium 1401
Neisseria allergen nucleoprotein 138
Neisseria antiserum agar method 784
Neisseria culture transport 119
Neisseria cyclic AMP 235
Neisseria serotype 929
Neisseria typing auxanog 512
Neurospora UDP acetylglucosamine pyrophosphorylase 1381
 Nickel toxicity algae 1094
 Nitrate reductase *Diplodia* 167
 Nitrate reductase nitrogen fixation *Rhizobium* 1169
 Nitrogen enzyme *Diplodia* 167
 Nitrogen fixation *Arthrobacter* oxygen growth 746
 Nitrogen fixation *Clostridium* ecol 947
 Nitrogen fixation nitrate reductase *Rhizobium* 1169
 Nitrogen fixation *Poa* bacteria 1197
 Nitrogen fixation *Rhizobium* morphol 352
 Nitrogen fixation *Rhizobium* *Parasponia* 565
 Nitrogen mustard *Candida* infection 1015
 Nitrogen source hydrazine metab *Pseudomonas* 822
 Nitrogen soybean level *Rhizobium* 739
 Nitrogen *Streptomyces* cephaosporin prodn 61
 Nitrogenase algae nickel toxicity 1094
 Nitrogenase *Arthrobacter* growth respiration 746
 Nitrogenase *Clostridium* ecol 947
 Nitrogenase restoration *Rhizobium* pleiotropic mutant 298
 Nitrous oxide redn soil *Pseudomonas* 1133
 Nodulation clover root phage *Rhizobium* 968 974
 NRCC research journals semicentennial i
 Nuclease halophilic prodn *Micrococcus* 1113
 Nuclease *Staphylococcus* detn food 44
 Nucleoprotein *Neisseria* allergen 138
 Nucleotide *Corynebacterium* toxin toxicity 285
 Nucleotide pyrophosphatase *Streptomyces* 53
 Nutrition taxonomy carbon *Bacillus* 491
 Oil metab fungi 146
 Org matter oxygen algae bacteria 1315
 Outer membrane cation *Salmonella* *Escherichia* 475
 Outer membrane ghost *Escherichia* 436
 Outer membrane protein *Escherichia* 423
 Oxidase phenol *Rhizoctonia* 229
 Oxidase prophol activation crayfish 406
 Oxygen *Arthrobacter* growth nitrogen fixation 746
 Oxygen org matter algae bacteria 1315
 Oxygen tension *Azotobacter* lipid 1239
 Oxygen tolerance *Campylobacter* 1
 Oxygen tolerance *Campylobacter* superoxide peroxide 8
 Pantothenate *Saccharomyces* sulfate sulfur isotope 1139
 Parasitism *Sclerotium* *Sclerotinia* 17
 Parasitism spore germination survival *Sporidesmium* 1021
Parasponia *Rhizobium* nitrogen fixation 565
 Pathogenesis *Bacillus* infection *Culex* Larvae 178
 Pathogenic mycobacterium studies 217
 Patulin formation *Penicillium* 881
 Penicillin aminoglycoside synergism detn 1232
 Penicillinase *Staphylococcus* transduction 508
 Penicillium isopoxydon dehydrogenase 881
 Penicillium mycophenolate cell cycle 940
 Peptidoglycan formation guanosine tetraphosphate *Escherichia* 1206
 Periplasm *Comamonas* tyrosine sulfate sulfohydrolase 275
 Peroxide *Campylobacter* oxygen tolerance 8
 Peroxide hydrogen *Proteus* resistance 312
 Pesticide apple leaf litter microorganism 1331
 Petroleum fungi 146

- PHA lymphocyte cynomolgus monkey Coxiella 949
 Phage DNA taxonomy *Micrococcus* 1027
 Phage *Pseudomonas* antibiotic formation 1108
 Phage *Rhizobium* 979
 Phage *Rhizobium* nodulation clover root 968 974
 Phage *Salmonella* DNA protein sugar 1063
 Phage SH133 mutant *Pseudomonas* 86
 Phage *Staphylococcus* antibiotic resistance transduction 508
 Phage *Streptococcus* capsule milk 1182
 Phage T4 T7 infection *Escherichia* 867
 Phenazine methosulfate bacteria physiol 798
 Phenol oxidase precursor activation crayfish 406
 Phenol oxidase *Rhizoctonia* 229
 Phenylacetate *Bacteroides* identification 927
 Phosphatase alk detn *Escherichia* phosphate uptake 560
 Phosphatase alk stomach ruminant 932
 Phosphate transport *Monascus* pH 1484
 Phosphate uptake *Escherichia* alk phosphatase detn 560
 Phospholipid outer membrane *Escherichia* 436
 Photosynthesis algae nickel toxicity 1094
 Photosynthesis metab *Chlorobium* 999
 Phyllostine metab *Penicillium* 881
 Physarum bacteria lipopolysaccharide 124
 Phytopathogenic *Corynebacterium* bacteriocin 367
 Pigment carotenoid formation *Halobacterium* 1292
 Pigment carotenoid *Halobacterium* glycerol 1288
 Pigment conidia *Monascus* transport pH 1484
 Pili *Pseudomonas* 1175
 Pilin *Pseudomonas* pili 1175
 Plankton ammonium methylammonium transport 1401
 Plant insect spiroplasma grouping 861
 Plaque canine distemper virus 680
 Plasmid *Arthrobacter* hydroxypyridine metab 329
 Plasmid *Staphylococcus* antibiotic resistance 1468
 Plasmid Ti *Agrobacterium* virulence 291
 Plasmid transduction *Staphylococcus* antibiotic resistance 508
 Platinum *Escherichia* cell division 545
 Poa nitrogen fixation bacteria 1197
 Poliovirus filter membrane elution 1045
 Poliovirus urban sewage 1305
 Poliovirus water virol 1212
 Pollutant water mercury toxicity 1252
 Pollution seawater wastewater bacteria 1073
 Polyadenylate contg RNA *Botryodiplodia* spore 375
 Polyethylene glycol virus concn water 587
 Polygalacturonate transeliminase *Erwinia* *Yersinia* *Klebsiella* 94
 Polymyxin B intestine bacteria 995
 Polymyxin resistance *Agrobacterium* crown gall 185
 Polysaccharide formation *Rhizobium* ketogluconate 1191
 Potassium transport *Monascus* pH 1484
 Poultry manure bacteria exoenzyme 1258
 Powder skim milk *Staphylococcus* survival 237
 Precursors monocyte *Listeria* 698
 Prokaryote eukaryote origin review 651
 Prophenol oxidase activation crayfish 406
 Protease elastase toxin virulence *Pseudomonas* 593
 Protease formation *Serratia* 47
 Protease *Saccharomyces* flocculation 888
 Protease *Saccharomyces* flocculation correction 1489
 Protein fungi straw cellulose 793
 Protein iridescent virus Chilo 841
 Protein outer membrane *Escherichia* 423 436
 Protein *Pseudomonas* pili 1175
 Protein *Salmonella* phage 1063
Proteus catalase formation regulation 302
Proteus resistance hydrogen peroxide 312
 Protoplast *Candida* mutant snail enzyme 486
Pseudomonas antibiotic formation phage 1108
Pseudomonas genes transfer integration 637
Pseudomonas hydrazine metab nitrogen source 822
Pseudomonas lipopolysaccharide mutant 390
Pseudomonas methionine transport 1103
Pseudomonas nitrous oxide redn soil 1133
Pseudomonas phage SH133 mutant 86
Pseudomonas pili 1175
Pseudomonas rhodanese localization 340
Pseudomonas RNase formation 321
Pseudomonas rye halo blight light 163
Pseudomonas UTP alkylsulfatase induction magnesium 1008
Pseudomonas virulence toxin protease elastase 593
 Pyrophosphatase nucleotide *Streptomyces* 53
 Pyrophosphorylase UDP acetylglucosamine *Neurospora* 1381
 Rabies virus antibody electron microscopy 1209
 Radioassay *Candida* arsenical metab 1201
 Reductase nitrate *Diplodia* 167
 Reductase nitrate nitrogen fixation *Rhizobium* 1169
 Respiration *Arthrobacter* growth nitrogenase 746
 Review cytomegalovirus latent infection activation 245
 Review eukaryote origin prokaryote 651
 Review herpes virus replication latency 239
Rhizobium DNA labeling thymidine incorporation 675
Rhizobium fatty acid taxonomy 68
Rhizobium level soybean nitrogen 739
Rhizobium morphol nitrogen fixation 352
Rhizobium nitrate reductase nitrogen fixation 1169
Rhizobium *Parasponia* nitrogen fixation 565
Rhizobium phage 979
Rhizobium phage nodulation clover root 968 974
Rhizobium pleiotropic mutant nitrogenase restoration 298
Rhizobium polysaccharide formation ketogluconate 1191
Rhizobium taxonomy DNA fingerprint 803
Rhizoctonia assay soil debris 110
Rhizoctonia laccase 229
Rhizoctonia soil beet 902
Rhizoctonia soil texture 1310
 Rhodanese *Pseudomonas* localization 340
 River bacteria sediment 1058
 RNA polyadenylate contg *Botryodiplodia* spore 375
 RNase formation *Pseudomonas* 321
 Root maize infection microorganism 1264
 Rotavirus antiserum ELISA 1118
 Rubella hemagglutination inhibition lipoprotein 103
 Rumen epithelium bacteria phosphatase 932
 Ruminant stomach alk phosphatase 932
 Rye halo blight light 163
 Saccharification cellulose *Sclerotium* 773
Saccharomyces guanine metab genetics 380
Saccharomyces hydrolase flocculation 888
Saccharomyces hydrolase flocculation correction 1489
Saccharomyces invertase spheroplast 528
Saccharomyces sporulation amitoile induced um 650
Saccharomyces sulfate sulfur isotope pantothenate 1139
Salmonella antibiotic resistance 535
Salmonella *Escherichia* outer membrane 475
Salmonella *Escherichia* outer membrane cation 475
Salmonella gnotobiotic mice 1352
Salmonella new serotype 1328
Salmonella phage DNA protein sugar 1063
Salmonella sulfite metab isotope effect 1387
 Salt *Vibrio* electrolyte 922

- Sclerotinia infection Sporidesmium 1021
 Sclerotinia Sclerotium parasitism 17
 Sclerotium cellulose saccharification 773
 Sclerotium Sclerotinia parasitism 17
 Sea water urea Spirulina cultivation 752
 Seawater pollution wastewater bacteria 1073
 Sediment river bacteria 1058
 Semicentennial NRCC research journals i
 Serol grouping beta-hemolytic streptococci 40
 Serotype Neisseria 929
 Serratia protease formation 47
 Serum human Brucella antibody detection 850
 Sewage Bacteroidaceae cellulose metab 1427
 Sewage urban poliovirus 1305
 Sex development aggregation Dictyostelium 1416
 Sexual development Dictyostelium chemotaxis 542
 Shigella inhibition cocoa 233
 Shock endotoxin macrophage glucuronidase 1245
 Silver resistance Enterobacteriaceae 915
 Sindbis virus alpha vacuole 1452
 Skim milk powder Staphylococcus survival 237
 Sludge Bacteroidaceae cellulose metab 1427
 Snail enzyme Candida mutant protoplast 486
 Snail Salmonella antibiotic resistance 535
 Sodium chloride Vibrio electrolyte 922
 Sodium Salmonella Escherichia outer membrane 475
 Soil forest electron microscopy 943
 Soil forms min tubular 722
 Soil nitrogen fixation bluegrass bacteria 1197
 Soil Pseudomonas nitrous oxide redn 1133
 Soil Rhizoctonia beet 902
 Soil texture Rhizoctonia 1310
 Soil virus detection 874
 Soybean nitrogen level Rhizobium 739
 Spheroplast formation dithiothreitol Methanospirillum 730
 Spheroplast invertase Saccharomyces 528
 Spinach wilt root rhizosphere soil 227
 Spirochete particles bacteriophage 114
 Spiroplasma grouping plant insect 861
 Spiroplasma metab bactericide resistance 1125
 Spirulina cultivation urea sea water 752
 Spleen mitogenesis lipopolysaccharide 1087
 Spore Botrydiploia polyadenylate contg RNA 375
 Spore germination Dictyostelium 24
 Spore germination parasitism survival Sporidesmium 1021
 Spore wall compn structure Agaricus 32
 Spores coatless Clostridium 642
 Sporidesmium spore germination parasitism survival 1021
 Sporulation amitrole induced Saccharomyces um 650
 Sporulation Bacillus toxin mosquito larva 1227
 Sporulation catabolite repression Bacillus mutant 1283
 Sporulation germination amino acid Clostridium 522
 Sporulation mutant metab Bacillus 628
 Staphylococcal alpha toxin binding membrane 686
 Staphylococcus antibiotic resistance elimination 1476
 Staphylococcus antibiotic resistance plasmid transduc-
 tion 508
 Staphylococcus antimicrobial sensitivity Candida 429
 Staphylococcus detn food 44
 Staphylococcus food enumeration medium 1052
 Staphylococcus inhibition cocoa 233
 Staphylococcus plasmid antibiotic resistance 1468
 Staphylococcus survival powder skim milk 237
 Staphylococcus toxoid binding erythrocyte 1219
 Sterigmatocystin Chaetomium 170
 Sterol Cronartium taxonomy 1481
 Stomach ruminant alk phosphatase 932
 Straw cellulose fungi protein 793
 Streptococcus capsule phage milk 1182
 Streptomyces beta galactosidase induction 833
 Streptomyces cephalosporin prodn nitrogen 61
 Streptomyces lignocellulose metab 1270
 Streptomyces nucleotide pyrophosphatase 53
 Streptomyces cellulase screening 858
 Stressed cells Escherichia 116
 Streptomyces chloramphenicol formation enzyme 1408
 Sugar manuf cellulose Sclerotium 773
 Sugar Salmonella phage 1063
 Sulfate sulfur isotope pantothenate Saccharomyces 1139
 Sulfide Pseudomonas nitrous oxide redn 1133
 Sulfite metab isotope effect Salmonella 1387
 Sulfite redn thiosulfate formation Clostridium 719
 Sulfohydrolase tyrosine sulfate Comamonas location 275
 Sulfur isotope effect Clostridium 719
 Sulfur isotope sulfate pantothenate Saccharomyces 1139
 Superoxide Campylobacter oxygen tolerance 8
 Swine bacteria chlortetracycline feed 789
 Symbiosis eukaryote origin review 651
 Synthetase arylamine Streptomyces 1408
 Synthetase GMP Saccharomyces gene 380
 Taxonomy Aeromonas DNA homol 579
 Taxonomy Aeromonas DNA homol correction 1489
 Taxonomy Cronartium sterol fatty acid 1481
 Taxonomy Enterobacteriaceae DNA hybridization 713
 Taxonomy phage DNA Micrococcus 1027
 Taxonomy Rhizobium DNA fingerprint 803
 Taxonomy Rhizobium fatty acid 68
 Temp adenovirus sensitive mutant 646
 Tetracycline resistance Staphylococcus plasmid 1468
 Tetracycline resistance Staphylococcus transduction 508
 Thiocyanate metab Arthrobacter 1277
 Thiol Fusarium macroconidia 618
 Thiosulfate formation sulfite redn Clostridium 719
 Thymidine incorporation Rhizobium DNA labeling 675
 Toxin Bacillus sporulation mosquito larva 1227
 Toxin Corynebacterium toxicity nucleotide 285
 Toxin protease elastase Pseudomonas virulence 593
 Toxin staphylococcal binding membrane 686
 Toxoid Staphylococcus binding erythrocyte 1219
 Transduction Staphylococcus antibiotic resistance plasmid 508
 Transeliminase polygalacturonate Erwinia Yersinia Klebsiella 94
 Transfer integration genes Pseudomonas 637
 Transfer Vibrio water sediment 499
 Transport amino acid Bacteroides 1161
 Transport ammonium methylammonium plankton 1401
 Transport iron Campylobacter 1
 Transport mannose Amphora 605
 Transport methionine Pseudomonas 1103
 Transport phosphate potassium Monascus pH 1484
 Transport sulfate Saccharomyces pantothenate 1139
 Transport system bacteria phenazine methanesulfate 798
 Treponema mammalian epithelial cells 399
 Trichophyton arthrospore temp medium atm 362
 Trimethoprim Mycobacterium differentiation 991
 Tryptone cocoa toxicity bacteria 233
 Tubercle bacilli transmittable modification 462
 Tubular min forms soil 722
 Turf nitrogen fixation bacteria 1197
 Tyrosine sulfate sulfohydrolase Comamonas location 275

- UDP acetylglucosamine pyrophosphorylase *Neurospora* 1381
Urea sea water *Spirulina* cultivation 752
UTP magnesium *Pseudomonas* alkylsulfatase induction 1008
Vaccine influenza live 279
Vacuole alpha virus Sindbis 1452
Valine formation *Eubacterium* aminobutyrate 1394
Varicella Zoster cell transformation 254
Vibrio chemotaxis algae product 964
Vibrio electrolyte sodium chloride 922
Vibrio transfer water sediment 499
Virol water poliovirus 1212
Virulence *Pseudomonas* toxin protease elastase 593
Virus alpha Sindbis vacuole 1452
Virus concn water polyethylene glycol 587
Virus cytomegalo IgG antibody ELISA 1082
Virus detection soil 874
Virus distemper plaque canine 680
Virus herpes replication latency review 239
Virus iridescent Chilo protein 841
Virus like particles caterpillar cells 207
Virus mosquitoes Cache valley 760
Virus polio filter membrane elution 1045
Virus polio water 1212
Virus rabies antibody electron microscopy 1209
Virus rota antiserum ELISA 1118
Wall spore compn structure *Agaricus* 32
Wastewater bacteria seawater pollution 1073
Water ecol bacteria 1433
Water pollutant mercury toxicity 1252
Water virol poliovirus 1212
Water virus concn polyethylene glycol 587
Wood biofouling bacteria 447
Yeast invertase spheroplast 528
Yeast magnetic field effect 1145
Yersinia agar selective 1298
Yersinia polygalacturonate transeliminase 94
Zearalenone antibacterial activity 421



